



JCT
COLLEGE OF ENGINEERING AND TECHNOLOGY

Date: 10-07-2022

To,
The Manager
Sunglow Biotech,
Coimbatore

Dear Madam,

Sub: Internship opportunity -Reg.

Greetings from JCT College of Engineering and Technology!

I would like to seek your kind patronage in providing internship opportunity to our Biotechnology and Biochemical Engineering students. It will be a great exposure for them to gain industrial and hands on experience.

We request you to kindly share the availability schedule at an early date

Thanking you,



With regards,

Dr. S. MANOHARAN, M.E., Ph.D., FIE
Principal
JCT College of Engineering & Technology
Coimbatore - 641 105.



JCT College of Engineering and Technology

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai)
Accredited by NAAC & Accredited by NBA for Petrochemical, Mechanical, EEE & CSE.)

Pichanur, Coimbatore - 641 105 Tamil Nadu INDIA Phone: +91 422 2636900 Fax: +91 422 2636901 Email: info@jct.ac.in www.jct.ac.in



12/14,Vedapatti Road, Perur (PO),Coimbatore 641 010

12.07.2022

INTERNSHIP ACCEPTANCE LETTER

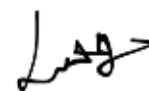
We are pleased to give accept your internship request for your Biotechnology and Biochemical Engineering students. They can join the Internship training in our organization during the period from July 20th,2022 to August 5th,2022. During the internship they have to follow the rules and regulations of the company.

We wish him best wishes in future endeavours.

Thanks & Regards




PRINCIPAL
JCT College of Engineering and Technology
PICHANUR COIMBATORE - 641 105

- 

Manager



JCT
COLLEGE OF ENGINEERING AND TECHNOLOGY

Date: 10-07-2022

To,
The Manager
Viyen Biotech LLP,
Coimbatore

Dear Madam,

Sub: Internship opportunity -Reg.

Greetings from JCT College of Engineering and Technology!

I would like to seek your kind patronage in providing internship opportunity to our Biotechnology and Biochemical Engineering students. It will be a great exposure for them to gain industrial and hands on experience.

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Viyen Biotech LLP

5.42,AKS Nagar,Rakkipalayam,Coimbatore-641031,Tamilnadu

12.07.2022

INTERNSHIP ACCEPTANCE LETTER

We are pleased to give accept your internship request for your Biotechnology and Biochemical Engineering students. They can join the Internship training in our organization during the period from 20.07.2022 05.08.2022. During the internship they have to follow the rules and regulations of the company.

We wish him best wishes in future endeavours.

Thanks & Regards

(Viyen Biotech, Coimbatore)




PRINCIPAL
JCT College of Engineering and Technology
PICHANUR COIMBATORE - 641 105



JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
PICHANUR COIMBATORE-641 105



DEPARTMENT OF BIOTECHNOLOGY AND BIOCHEMICAL ENGINEERING

ACADEMIC YEAR 2021-2022: INTERNSHIP DETAILS

S.No.	Students name	Duration	INTERNSHIP DETAILS
1	AISWARYA A P	15 days	Sunglow Biotech, Coimbatore
2	AKHILA A P	15 days	Sunglow Biotech, Coimbatore
3	ANANTHAKRISHNA S	15 days	Sunglow Biotech, Coimbatore
4	ATHIRA V	15 days	Sunglow Biotech, Coimbatore
5	JEYAPAL B	15 days	Sunglow Biotech, Coimbatore
6	KAMESH M	15 days	Sunglow Biotech, Coimbatore
7	MUHAMMED SAFVAN K	15 days	Viyen Biotech LLP, Coimbatore
8	NANDHANA	15 days	Viyen Biotech LLP, Coimbatore
9	PRIYADHARSHINI K	15 days	Viyen Biotech LLP, Coimbatore
10	SREELAKSHMI M S	15 days	Viyen Biotech LLP, Coimbatore
11	SRIKANTH V	15 days	Viyen Biotech LLP, Coimbatore

HOD
(Dr.G.GNANAVEL)



PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.



12/14, Vedapatti Road, Perur (PO), Coimbatore 641 010
0422 6538546 , 9244638689 sunglowbiotech@sify.com, glowsun@rediffmail.com

CERTIFICATE

This certificate is proudly presents AISWARYA A P From

JCT College of Engineering and Technology, Coimbatore, attending internship:

Plant Tissue Culture from July 20, 2022 to August 5, 2022.

Manager



PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.



12/14, Vedapatti Road, Perur (PO), Coimbatore 641 010
0422 6538546 , 9244638689 sunglowbiotech@sify.com, glowsun@rediffmail.com

CERTIFICATE

This certificate is proudly presents **KAMESH M** From JCT

College of Engineering and Technology, Coimbatore, attending internship:

Plant Tissue Culture from July 20, 2022 to August 5, 2022.

Manager



PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.



Viya Biotech LLP
5.42,AKS Nagar,Rakkipalayam,Coimbatore-641031,Tamilnadu
9843925312 contactviya@gmail.com

CERTIFICATE

This certificate is proudly presents **SRIKANTH V** from JCT

College of Engineering and Technology, Coimbatore, attending internship program:

Title - Plant Tissue Culture from July 20,2022 to August 5,2022.

(Viya Biotech,Coimbatore)



PRINCIPAL

JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

**DEPARTMENT OF AUTOMOBILE ENGINEERING
(PROJECT TITLE (2021-22 VIII EVEN SEMESTER))**

BATCH NO	BATCH MEMBERS	REG NO	GUIDE NAME	PROJECT TITLE
I	FAIZ MUHAMMED.N	720918103009	Dr.V.Venugopalan	Experimental investigation on Partial Replacement of Coarse Aggregate in Concrete by Crushed Tiles
	HIJAS.A.S	720918103011		
	NAVEEN.S	720918103017		
	SUDHINRAJ. S	720918103020		
II	ADITHYAN.D.K	720918103002	Mr.P.Balachandiran	Experimental investigation on Polypropylene fibre Reinforced Concrete By Partial Replacement of GGBS to Cement and Concrete to Coarse Aggregate
	BHAVYA.S	720918103007		
	LIBIN.B	720918103014		
	MUHSINA.S	720918103015		
III	ALEN V S	720918103003	Mr.S.Sadhasivam	Experimental investigation on Stabilisation of Black cotton Soil By Using Glime And Steel Slag
	AKSHAYA.K	720918103301		
	JAYANIVEDA.T	720918103302		
	RIZVIN AKBER	720918103901		
IV	AMAL RAJ	720918103004	Mr.S Mahalingam	Experimental Study on Self Healing Concrete Using Copper Slag As Fine Aggregate
	ASHWAN.O	720918103005		
	ASLAH.P.M	720918103006		
	SYED AFSAL.M	720918103021		

PROJECT CO ORDINATOR

HOD CIVIL



JCT COLLEGE OF ENGINEERING AND TECHNOLOGY, PICHANUR.
DEPARTMENT OF AUTOMOBILE ENGINEERING
PROJECT TITLE (2021-22 ODD SEMESTER)

BATCH NO	BATCH MEMBERS	REG NO	GUIDE NAME	PROJECT TITLE
I	SYED AFSAL.M	720918103021	Mr.P.Balachandiran	Planning & Designing of an Apartment Building
	FAIZ MUHAMMED.N	720918103009		
	ASLAH.P.M	720918103006		
	AMAL RAJ	720918103004		
II	PRADEEP V	720918103018	Dr.V.Murugesh	Planning, Analysis and Designing of A Hostel Building
	JERON KISHOR J	720918103013		
	DHANUSH B	720918103008		
	SOPNA.K	720918103019		
III	ALEN V S	720918103003	Mr.S.Sadhasivam	Planning, Analysis and Designing of A Hotel Building
	AKSHAYA.K	720918103301		
	JAYANIVEDA.T	720918103302		
	RIZVIN AKBER	720918103901		
IV	AMAL RAJ	720918103004	Mr.S Mahalingam	Planning, Analysis and Designing of A School Building
	ASHWAN.O	720918103005		
	ASLAH.P.M	720918103006		
	SYED AFSAL.M	720918103021		



PROJECT CO ORDINATOR



HOD CIVIL




PRINCIPAL
 JCT College of Engineering and Technology
 PICHANUR, COIMBATORE - 641 105.

J.K BUILDERS
Specialists in Structutre
development,design,planning,building

Date: 10/09/2021 COIMBATORE

This is certified that ADITHYAN.D.K
720918103002 B.E.Civil engineering(2018-2022) of
J.C.T college of engineering and technology, for
the industrial training done on the study and
practical in Basement building and Structural
development in our concerned firm for 31 days
(02/08/2021-02/09/2021). He had co-operated
with us and gave his best performance in the field.



JK

For J.K BUILDERS

J.K BUILDERS
Specialists in Structutre
development,design,planning,building

Date: 10/09/2021 COIMBATORE

This is certified that ALEN V S
720918103003 B.E.Civil engineering(2018-2022) of
J.C.T college of engineering and technology, for
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Date: 10/09/2021 COIMBATORE

This is certified that AMAL RAJ
720918103004 B.E.Civil engineering(2018-2022) of
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Date: 10/09/2021 COIMBATORE

This is certified that BHAVYA.S
720918103007 B.E.Civil engineering(2018-2022) of
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720918103008 B.E.Civil engineering(2018-2022) of
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720918103020 B.E.Civil engineering(2018-2022) of
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Date: 10/09/2021 COIMBATORE

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720918103302 B.E.Civil engineering(2018-2022) of
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Date: 10/09/2021 COIMBATORE

This is certified that RIZVIN AKBER
720918103901 B.E.Civil engineering(2018-2022) of
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with us and gave his best performance in the field.



JK

For J.K BUILDERS

ANNA UNIVERSITY: CHENNAI 600 025

BONAFIDE CERTIFICATE

Certified that this Project report “**EXPERIMENTAL INVESTIGATION ON STABILIZATION OF BLACK COTTON SOIL BY USING LIME AND STEEL SLAG**” is the bonafide work of.....*Allen V. S.*..... who carried out the Project work under my supervision.

HEAD OF THE DEPARTMENT

Prof.A.KUMAR,M.E,Ph.D.,
Department of Civil Engineering
JCT College of Engineering and
Technology,Coimbatore.

M. Sadhasivam
23/6/22
SUPERVISOR

Mr.M.SADHASIVAM.,M.E.,
Department of Civil Engineering
JCT College of Engineering and
Technology,Coimbatore.

Submitted for the Viva-voice held on.....

ATM 23/6/22

INTERNAL EXAMINER

R. Senthil
23/6
EXTERNAL EXAMINER

ABSTRACT

In this project, we have planned, analyzed and designed an overhead circular reinforced cement concrete tank, to cater to requirements of Seerapalayam village panchayat. The population of the village panchayat is estimated as 1350 using conventional population forecasting methods. For this requirement, a circular overhead water tank is planned using the popular drafting software AutoCAD 2D. It is further analyzed using the premiere analysis software STAADPRO. Based on the analysis using STAAD PRO, the salient features of the overhead circular water tank is manually designed. The design and detailed drawings are presented in this projectwork.

ANNA UNIVERSITY: CHENNAI 600 025

BONAFIDE CERTIFICATE

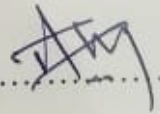
Certified that this Project report “**EXPERIMENTAL INVESTIGATION ON STABILIZATION OF BLACK COTTON SOIL BY USING LIME AND STEEL SLAG**” is the bonafide work of.....Allen V. D...... who carried out the Project work under my supervision.

HEAD OF THE DEPARTMENT

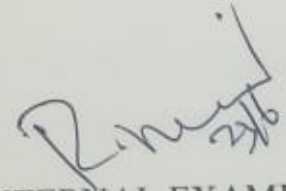
Prof.A.KUMAR,M.E,Ph.D.,
Department of Civil Engineering
JCT College of Engineering and
Technology,Coimbatore.


SUPERVISOR

Mr.M.SADHASIVAM.,M.E.,
Department of Civil Engineering
JCT College of Engineering and
Technology,Coimbatore.

Submitted for the Viva-voice held on..........23/6/22.....

INTERNAL EXAMINER

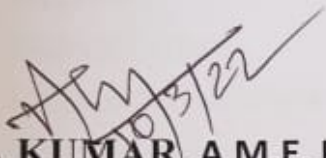

EXTERNAL EXAMINER

ABSTRACT

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BONAFIDE CERTIFICATE

Certified that this in mini project report “planning and designing of an apartment building” is the bonafide work of “.....Anal Raj.....” who carried out thymine project work under my supervision.


Dr.A.KUMAR .A M.E, Ph.D.,

Mr.Balachandiran.P M.E,

HEAD OF THE DEPARTMENT

PROJECT GUIDE

Department of civil engineering

Assistant professor

JCTCET

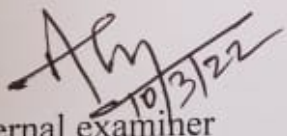
Department of civil engineering

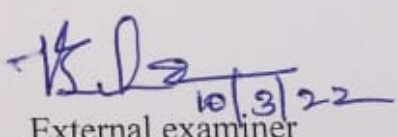
Coimbatore- 641 105

JCTCET

Coimbatore- 641 105

Submitted for the project phase 1 viva – voice examination held on 10/03/2022


Internal examiner


External examiner

Chapter 6

CONCLUSIONS

As we know that the strong section of a plain concrete is compressive strength and the weak section is the tensile strength.

- The results shows that the compressive strength of the concrete is increased up to 7% of the normal compressive strength by the replacement of coarse aggregate by crushed ceramic tiles up to 40% of replacement.
- The flexural strength of the concrete is not much affected by the replacement of the coarse aggregate by crushed ceramic tiles and it have a neutral approach to the results when compared with standard results.
- The split tensile strength of the concrete is also not much affected by the replacement of the coarse aggregate by crushed ceramic tiles and it have a stable approach to the results of standard concrete.
- The durability strength of the concrete is getting decreased by the increase in the replacement of coarse aggregate by crushed ceramic tiles due to the acidic attack to the ceramic tiles.
- Workability of the concrete is getting decreased due to the increased water absorption by ceramic tiles.

ABSTRACT

Solid waste management is an important environmental concern in our day to day life. Due to the increase in the developments in the construction industry, the aggregate usage becomes very high. Though, it leads to the scarcity of natural materials. Because of this, the inclusion of recycled solid wastes is come into practice. The discarded ceramic tile wastes are recycled and used as a construction material in the present world, which are economical and environmental friendly. This paper is to study the properties of concrete by partially replacing stone aggregates by crushed broken tiles. The target compressive strength of stone aggregate concrete was 20MPa. Remaining concrete were made by the partial replacement of stone aggregates by the equal weight of crushed tile aggregates. The study was carried out in 10%, 20%, 30% and 40% of the replacement. The result showed that there is an increase in the compressive strength, flexural strength and a reduction in the unit weight of concrete by about 7 and 28 days respectively.

Keywords: Ceramic tiles, Los angeles abrasion test, Acid attack test, Split tensile test.

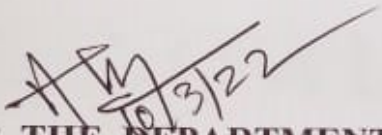
ANNA UNIVERSITY: CHENNAI 600 025

BONAFIDE CERTIFICATE

Certified that this project report "PLANNING ANALYSIS AND
DESIGNING OF OVERHEAD CIRCULAR WATER TANK" is the
bonafide work done by

.....MUHSINA.S.....

Reg No...7.20918103015..... of final year Civil Engineering
(2021-2022) who carried out the project work under my supervision.


10/3/22

HEAD OF THE DEPARTMENT

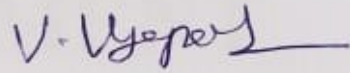
Dr.A.KUMAR,ME,Ph.D

Professor and head

Department of civil engineering

JCTCET

COIMBATORE



SUPERVISOR

Dr.V.VENUGOPALAN,ME,Ph.D

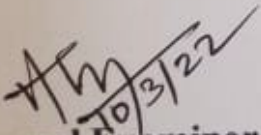
Assistant professor

Department of civil engineering

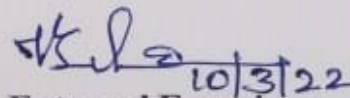
JCTCET

COIMBATORE

Submitted for the project viva-voice examination held on ..10.03.2022.....


10/3/22

Internal Examiner


10/3/22

External Examiner

5.1 CONCLUSION

The objective of the project was to design a circular overhead tank for a village panchayat and the same was achieved as listed as follows

Seerapalayam Village Panchayat was chosen as the location and population was estimated for the panchayat. Based on the estimated population and prevailing water demand, the quantity of water to be supplied and stored in the tank was computed.

The plan and other drawings for the circular overhead water tank was prepared using AutoCAD 2D software

The analysis was done using STAAD PRO software and the structure was analyzed for self-weight, meshes for surface loads, brace properties, etc and the outputs were verified. The design data were acquired after due analysis.

After analysis, the design data were generated. Based on the design data, the overhead circular tank was designed manually.

The design would satisfy the safety and economy norms and can be used for any village panchayat with similar population.

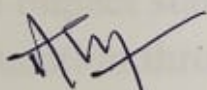
**JCT COLLEGE OF ENGINEERING AND
TECHNOLOGY**

ANNA UNIVERSITY : CHENNAI 600025

BONAFIDE CERTIFICATE

DEPARTMENT OF CIVIL ENGINEERING

Certified that this project report "EXPERIMENTAL INVESTIGATION ON POLYPROPYLENE FIBER RIENFORCED CONCRETE BY PARTIAL REPLACEMENT OF GGBS TO CEMENT AND WASTE CONCRETE TO COARSE AGGREGATE" is the bonafied work of who carried out the project work under my supervision.

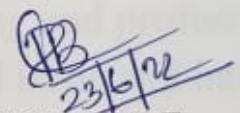

HEAD OF THE DEPARTMENT

Dr. A KUMAR , ME , Ph.D

Professor and HOD

Depatment of civil engineering

JCTCET , COIMBATORE


PROJECT GUIDE

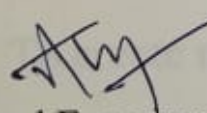
Mr. P BALACHANDIRAN, BE,ME

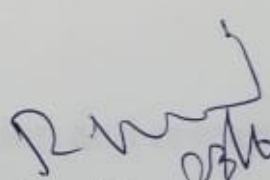
Assistent professor

Department of civil engineering

JCTCET , COIMBATORE

Submitted for the viva voice conducted on 23/06/2022


Internal Examiner


External Examiner

9. CONCLUSION

CONCLUSION :

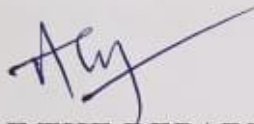
Experimental investigation on compressive strength, split tensile strength and flexural strength on PFRC.

- Replacement DWC to coarse aggregate with different percentage (30%, 35%, 40% and 45%) does not decrease workability of concrete.
- Mechanical properties of PFRC were increased upto 35% , greater than 35% of DWC it properties goes decreased. So we use optimized 35% of DWC, 10% of GGBS and 1% of polypropylene fiber into the concrete.
- Compressive strength of PFRC is 30% increased than conventional concrete at the curing period of 28 days.
- Split tensile strength of PFRC is 10% is increased than the conventional concrete at curing period of 28 days.
- Flexural strength of PFRC is 20% increased than the conventional concrete at the curing period of 28 days.

ANNA UNIVERSITY: CHENNAI 600 025

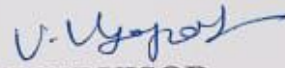
BONAFIDE CERTIFICATE

Certified that this Project report "**PARTIAL REPLACEMENT OF COARSE AGGREGATE IN CONCRETE BY CRUSHED TILES**" is the bonafide work of who carried out the Project work under my supervision.



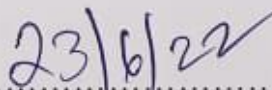
HEAD OF THE DEPARTMENT

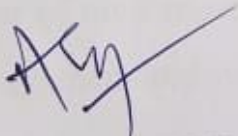
Prof.A.KUMAR, M.E,Ph.D.,
Department of Civil Engineering
JCT College of Engineering and
Technology, Coimbatore.



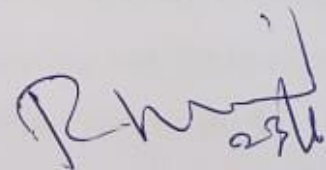
SUPERVISOR

Dr.V.VENUGOPALAN,M.E,Ph.D
Department of Civil Engineering
JCT College of Engineering and
Technology, Coimbatore.

Submitted for the Viva-voice held on.....



INTERNAL EXAMINER



EXTERNAL EXAMINER

ABSTRACT

A modern lifestyle, alongside the advancement of technology has led to an increase in the amount and type of waste being generated, leading to waste disposal problems. This study tackles the problem of the waste that is generated from construction fields, such as demolished concrete, glass and plastic. In order to dispose of or at least reduce the accumulation of certain kinds of waste, it has been suggested to reuse demolished concrete waste materials to substitute a percentage of the primary materials used in the concrete.

The demolished waste concrete is to be used as a substitute material based on the various percentages to coarse aggregate. The percentage are considered to use as 30%, 35%, 40% and 45% of demolished waste concrete to coarse aggregate. In addition of 10% of GGBS has been replaced to weight of cement. Then polypropylene fiber is added is to concrete as an additive by the weight of cement for improving the strength of concrete. We have to select M30 grade of concrete for conventional mix as well as design mix. Compression strength, split tensile strength and flexural strength test were carried out with the curing period of 7 and 28 days. Then the results were compared with conventional mix (vs) design mix.

ABSTRACT

This project details the planning, analysis & designing of a Hotel Building is to be proposed at coimbatour district.

The total area of the building at the plinth level is 573.18m^2 .

OBJECTIVE

To learn the basic norms and regulation required to construct a

Hotel building To learn about the Municipal bylaws, etc.

To draw the Building plan of Hotel building by using AUTO-CADD.

BRIEF METHODOLOGY

The building will be constructed as a framed structure with four floors and the hotel with both restaurant and lodging with recreation activities like car parking, etc.

For the design of hotel, we adopt M20 grade concrete and Fe415 grade steel is used. Its design is based on IS 456-2000 RCC code and IS 800-2007 steel codes are used.

ABSTRACT

This project describes planning and designing of an Apartment building. The proposed apartment building will be constructed at Kadamkode junction, Thalakkad. The proposed apartment building will be of framed structure and to compute the force and moment will be carried by manually. The structural members like slabs, columns, footing and lintel cum sunshade etc., are designed by limit state method with the help of national building code and IS456-2000; M20 grade concrete and fe415 grade steel are to be used.

INTRODUCTION

ANNA UNIVERSITY: CHENNAI 600 025

BONAFIDE CERTIFICATE

Certified that this Project report “**PLANNING, ANALYSIS AND DESIGNING OF A HOTEL BUILDING**” is the bonafide work of *Pradeep V., Jeron* ..*Kishor J., Dhanush B., Sopna K.*..... who carried out the Project work under my supervision.

HEAD OF THE DEPARTMENT

Prof.A.KUMAR, M.E,Ph.D.,

Department of Civil Engineering
JCT College of Engineering and
Technology, Coimbatore.

SUPERVISOR

Dr.V.MURUGESH, M.E.,Ph.D.,

Department of Civil Engineering
JCT College of Engineering and
Technology, Coimbatore.

Submitted for the Viva-voice held on....*10/03/2022*.....

INTERNAL EXAMINER

EXTERNAL EXAMINER

CONCLUSION

From this project work we have learnt to plan and design a building independently from the knowledge we have gained from, various civil engineering subjects throughout our course of study of previous years.

Due to the space limitations and huge cost of site in the present days , we have planned to construct PLANNING AND DESIGNING OF AN APARTMENT BUILDING as a building. As it is densely populated with working class people and entrepreneurs we have planned for Apartment for the benefit of people.

REFERENCE

CONCLUSION

Our project includes the details of Planning and Designing of a Hotel building. Limit state method is used to design the structural members.

As we can conclude that there is lot of difference in field as well as in theory. By finishing the project we identified lot of differences. Also we got knowledge on designing.

First class materials are provided for the construction. Proper ventilation as per the requirements, modern construction methods is adopted.

Rainwater harvesting arrangement and Solar panels also provided. By considering the future demand for water the rain water harvesting arrangements included in our project.

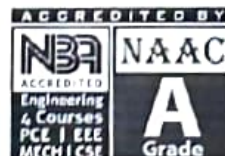
By completing this project, we learned the basic principles and requirements needed for planning and designing of a Hotel building.

Sl. No.	Title of the collaborative activity	Name of the collaborating agency with contact details	Name of the participant	Year of collaboration	Duration
1	Internship	Sysbreeze Technologies	Abhay M Das	2021-22	(27.09.2021 to 16.10.2021)
2	Internship	Nestsoft	Sujitha	2021-22	18.10.2021 to 18.11.2021
3	Internship	Sysbreeze Technologies	Vishnu	2021-22	(27.09.2021 to 16.10.2021)
4	Internship	Zindot	Adithya	2021-22	12.08.2022 to 26.08.2022
5	Internship	Sysbreeze Technologies	Vikram	2021-22	(27.09.2021 to 16.10.2021)
6	Internship	Zindot	Vismaya	2021-22	12.08.2022 to 26.08.2022
7	Internship	Sysbreeze Technologies	Salim	2021-22	(27.09.2021 to 16.10.2021)
8	Internship	Zindot	Rahul Vijay	2021-22	12.08.2022 to 26.08.2022
9	Internship	Sysbreeze Technologies	Deepak Girish	2021-22	(27.09.2021 to 16.10.2021)
10	Internship	Zindot	Bhavya	2021-22	12.08.2022 to 26.08.2022
11	Internship	Sysbreeze Technologies	Navaz Sherief	2021-22	(27.09.2021 to 16.10.2021)
12	Internship	Sysbreeze Technologies	Nikhil	2021-22	(27.09.2021 to 16.10.2021)
13	Internship	Sysbreeze Technologies	Nisaj Ahamed	2021-22	(27.09.2021 to 16.10.2021)
14	Internship	Sysbreeze Technologies	Adiyhiyan	2021-22	(27.09.2021 to 16.10.2021)
15	Internship	Sysbreeze Technologies	Aswin Krishna	2021-22	(27.09.2021 to 16.10.2021)
16	Internship	Sysbreeze Technologies	Tunga Naveen	2021-22	(27.09.2021 to 16.10.2021)
17	Internship	Sysbreeze Technologies	Kabilan	2021-22	(27.09.2021 to 16.10.2021)
18	Internship	Sysbreeze Technologies	Nazniya Henna	2021-22	(27.09.2021 to 16.10.2021)
19	Internship	NestSoft	Anusha	2021-22	18.10.2021 to 18.11.2021
20	Internship	Sysbreeze Technologies	Vishnu Dev	2021-22	(27.09.2021 to 16.10.2021)
21	Internship	Sysbreeze Technologies	Rahul Vijay	2021-22	(27.09.2021 to 16.10.2021)



JCT | College of Engineering
and Technology

Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai & Accredited by NAAC
Pichanur, Coimbatore - 641105 | info@jct.ac.in | www.jct.ac.in | 0422 2636900



Date: 11-07-2022

To

The Director,

Zindot Tehnologies,

Edappally.

Dear Sir,

Sub: Internship opportunity -Reg.

Greetings from JCT College of Engineering and Technology!

I would like to seek your kind patronage in providing internship opportunity to our Computer Science and Business Systems students. It will be a great exposure for them to gain industrial experience.

We request you to kindly share the availability schedule at an early date

Thanking You,




Principal


PRINCIPAL

14.07.2022

INTERNSHIP ACCEPTANCE LETTER

We are pleased to give accept your internship request for your Computer Science and Business Systems students. They canjoin the Internship training in our organization during the period from 27.07.2022 to 12.08.2022. During the internship they have to follow the rules and regulations of the company.

We wish him best wishes in future endeavors.

Thanks & Regards

Director
Zindot Technologies
Edappally

A handwritten signature in blue ink, appearing to be "S. G. 19/1/22".

PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.

Certificate of Appreciation

This is to certify that

ABHAY M DAS

student of

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY

has successfully completed 15 Days Internship Training in WEB DEVELOPMENT
from Aug 12, 2022 at Zindot, Kochi. During the internship period we found him/her a sincere,
honest, hardworking, dedicated student with a professional attitude and very good profes-
sional knowledge.

Date : 26-08-2022



Director
Zindot



Certificate of Appreciation

This is to certify that

ADITHYA P S

student of

ICT COLLEGE OF ENGINEERING AND TECHNOLOGY

has successfully completed 15 Days Internship Training in WEB DEVELOPMENT
from Aug 12, 2022 at Zindot, Kochi. During the internship period we found him/her a sincere,
honest, hardworking, dedicated student with a professional attitude and very good profes-
sional knowledge.

Date : 26-08-2022

3/16


Director
Zindot



Certificate of Appreciation

This is to certify that

VTSMAYA V V

student of

ICT COLLEGE OF ENGINEERING AND TECHNOLOGY

has successfully completed 15 Days Internship Training in WEB DEVELOPMENT
from Aug 12, 2022 at Zindot, Kochi. During the internship period we found him/her a sincere,
honest, hardworking, dedicated student with a professional attitude and very good profes-
sional knowledge.

Date : 26-08-2022


Director
Zindot



zindot.in

Certificate of Appreciation

This is to certify that

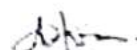
RAHUL VIJAY

student of

ICT COLLEGE OF ENGINEERING AND TECHNOLOGY

has successfully completed 15 Days Internship Training in WEB DEVELOPMENT
from Aug 12, 2022 at Zindot Kochi. During the internship period we found him/her a sincere,
honest, hardworking, dedicated student with a professional attitude and very good professional knowledge.

Date 26-08-22


Director
Zindot



16.09.2021

INTERNSHIP ACCEPTANCE LETTER

We are pleased to give accept your internship request for your Computer Science and Business Systems students. They canjoin the Internship training in our organization during the period from 27.09.2021 to 16.10.2021. During the internship they have to follow the rules and regulations of the company.

We wish him best wishes in future endeavors.

Thanks & Regards

JinsiGopinath

Project Manager

Sysbreeze Technologies



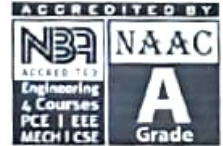
PRINCIPAL

JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.



JCT College of Engineering
and Technology

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Pichanur, Coimbatore - 641105 | info@jct.ac.in | www.jct.ac.in | 0422 2636900



Date: 13-09-2021

To

Jinsi Gopinath,

Project Manager,

Sysbreeze Technologies,

Kerala 673635.

Dear Sir,

Sub: Internship opportunity -Reg.

Greetings from JCT College of Engineering and Technology!

I would like to seek your kind patronage in providing internship opportunity to our Computer Science and Engineering students. It will be a great exposure for them to gain industrial experience.

We request you to kindly share the availability schedule at an early date

Thanking You,

[Handwritten signature]



[Handwritten signature]

Principal

PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.

CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

VIISHNUDEV K

Mr/Miss

a student of BTECH.CSBS From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY

has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021

programme on MOBILE APPLICATION -FLUTTER

at Sysbreeze technologies

16-10-2021

DATE



Signature

3.54

CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss VIISHNUDEV K

a student of BTECH.CSBS From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021

DATE



Signature

3.56

CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss RAHUL VIJAY

a student of BTECH.CSBS From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY

has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021

programme on MOBILE APPLICATION -FLUTTER

at Sysbreeze technologies

16-10-2021

DATE



Signature

CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss VIKRAM

a student of BTECH.CSBS From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021

DATE

Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss VIISHNU P V

a student of BTECH.CSBS From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature

CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss SALIM U

a student of BTECH.CSBS From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature

CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss DEEPAK GIRISH

a student of BTECH.CSBS From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
Programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021

DATE

Signature



Certificate of Appreciation

This is to certify that

BHAVYA K B

student of

ICT COLLEGE OF ENGINEERING AND TECHNOLOGY

has successfully completed 15 Days Internship Training in WEB DEVELOPMENT
from Aug 12, 2022 at Zindot, Kochi. During the internship period we found him/her a sincere,
honest, hardworking, dedicated student with a professional attitude and very good profes-
sional knowledge.




Director



Signature

CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss _____ **NIHKIL P**

a student of BTECH.CSBS From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature

CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss NISHAJ AHAMAD S

a student of BTECH.CSBS From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021

DATE



Signature

CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss ADITHIYAN

a student of BTECH.CSBS From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss ASWIN KRISHNA VB

a student of BTECH.CSBS From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature

CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss TUNGA NAVEEN

a student of BTECH.CSBS From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature

CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss KABILAN K

a student of BTECH.CSBS From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature

CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss NIZNIYA HENNA KT

a student of BTECH.CSBS From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021

DATE



Signature

Date: 18/11/2021

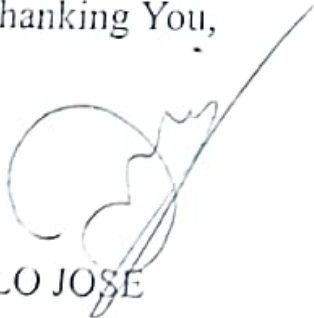
TO WHOM IT MAY CONCERN

This is to certify that MS.ANUSHA(JCT College Of Engineering And Technology, Coimbatore Course: B.E Computer Science & Engineering) has successfully completed one month internship programme from 18-10-2021 to 18-11-2021 at Nestsoft Technologies. Cochin.

During the course of internship, he has trained in Python Machine Learning. He had a self motivated attitude to learn new things and was successfully able to launch the project on time.

We wish all the best for his future endeavors.

Thanking You,



JILO JOSE

Project Leader
Nestsoft Technologies, Cochin



Date: 18/11/2021

TO WHOM IT MAY CONCERN

This is to certify that **Mr. SUJITHA** (JCT College Of Engineering And Technology, Coimbatore Course: B.E Computer Science & Engineering) has successfully completed one month internship programme from 18-10-2021 to 18-11-2021 at Nestsoft Technologies, Cochin.

During the course of internship, he has trained in Python Machine Learning. He had a self motivated attitude to learn new things and was successfully able to launch the project on time.

We wish all the best for his future endeavors.

Thanking You,



JILO JOSE

Project Leader

Nestsoft Technologies, Cochin





JCT

INTEGRATED PARKING SYSTEM FOR REAL-TIME PARKING

PROJECT REPORT

Submitted by,

AMAL E.R (720918104005)

MOHAMMED MUSTHAFA A.P (720918104021)

NABEEL K (720918104024)

SHIBIN K (720918104038)

In partial fulfillment for the award of the degree

of,

BACHELOR OF ENGINEERING

In

COMPUTER SCIENCE AND ENGINEERING

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY, PICHANUR,

COIMBATORE

ANNA UNIVERSITY: CHENNAI 600 025

JUNE 2022



PRINCIPAL

**JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.**

ABSTRACT

Parking space is becoming a serious problem due to the day-by-day increase in number of vehicles on the road. Particularly, in cities with large population, or in places where sports or artistic events are scheduled, looking for parking space is a major problem and finding a parking spot can be a frustrating experience. In order to combat this problem, here an integrated Parking System is envisioned. Although ample amount of research works on the development of smart parking system exist in literature, but most of them have not addressed the problem of real-time detection of improper parking and automatic collection of parking charges. In this proposed system, we implement a real time parking reservation system with a smart payment method.



PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.

CONCLUSION

This work presents the prototype of an integrated parking system that provides a novel parking management solution for various parking facility areas like a shopping malls, theaters, etc throughout the city. The system enables the drivers to obtain information on the availability of parking spaces and to reserve the parking lot via a web-based application.

It also enables the automatic collection of parking charges by providing smart payment options to the driver. This can save the user's time and fuel and also can relieve traffic in cities like Mumbai. In contrast to the existing parking strategies, this system limits the exertion of the driver in the parking areas, and also it could reduce the manual intervention in parking areas. By using this application, people can tackle the major issues while parking.




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LOCATION BASED ALARM SYSTEM
USING ANDROID DEVELOPMENT

A PROJECT REPORT

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ABSTRACT

Location based services are essential components of many location-based applications. Location based alarm represent an emerging location-aware, just-in-time web services, which can propagate information of location to the right users at the right time and the right place. It reminds the user about the location when the user enters some predefined location of interest in the future. All the user needs to have is the mobile phone with android platform, and then the user can select the destination and find the destination on the Google map. The user can even choose from pre-selected major locations or recently selected locations.

The main objective of the project is to develop a GPS (Global Positioning System) based application to handle the following requirements: To alert the users through an alarm when the user reaches near a preset location, To retrieve the users current location coordinates (Latitudes and Longitudes), To allows users to set their target location and save that target to the list, Allows user to delete and edit the alarms, To allow user to the out the reminder text along with the alarm.

The final system allow user to easily activate alarm in the mobile device. Based on the saved location on the mobile device, alarm will ring automatically and display remainder message when the user reaches the target location. This mobile alarm service will act as assistance for the frequent travelers to visit new places.

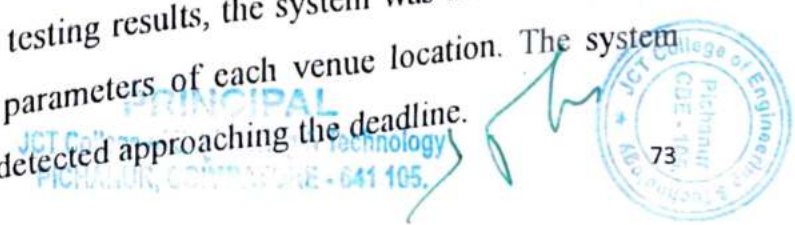



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CONCLUSION

The overall purpose of this application is to remind the works which we are having in our daily life based on the work location to which we are going. In this location-based alarm system based on the location of the mobile devices user will automatically retrieves the notification in relevant situations allowing them easily to activate or deactivate the alarm system. Till now there were so many applications for reminding the work schedule which are working based on the time. But in our application, we have introduced a new thought for reminding the daily works by using the GPS location system for placing alarm based on the location and by using clustering concept, we are able to place the alarm to the nearby places according to the user's desire. For the future enhancement of our application, we are planning to add the Data Mining concepts for better understanding of the user. The final system allow user to easily activate alarm in the mobile device. Based on the saved location on the mobile device, alarm will ring automatically and display remainder message when the user reaches the target location. The system will also integrate additional settings into the system. This mobile alarm service will act as assistance for the frequent travelers to visit new places.

In the modern life style people are very busy and often forget the tasks to do. Many times people remembers the task after they pass by the location of interest. Going back to the specific location again is time consuming & tiring too. This application helps the user to reach at exact location of interest in his preferred time slot. Timely reminder reduces chances of missing the location of interest & task to be reminded can be performed on desired time and at desired location. This reduces time loss & disappointment. Identifying desired nearby places is on figure tips of the user if the current location is unknown to the user. The application makes the search easy & faster. A reminder system which works based on the venue location and activity time has been completely developed. The system was built by using the APIs of Foursquare and Google Maps. This system also used spatial data from Google Maps to describe the location of the original venue in geographical coordinates. Based on the testing results, the system was able to notify the user when the user was in the radius parameters of each venue location. The system provided notifications when a note was detected approaching the deadline.





ONLINE BUSPASS ISSUE AND RENEWAL USING SELENIUM

A PROJECT REPORT

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ABSTRACT

The world today is largely dependent on computers; therefore, not being aware of the true of this trade is bound to make a person feel left out. Computers changed the world a lot, helped man step forward into the future. Thanks to computer, exploration came true, new designs of vehicles and other transportation were made; entertainment became more entertaining, medical science made more cures for diseases, etc. the computers impacted our lives in many ways. They did make life a lot easier. Without computers, world would be a harder place to live in. Thanks to the computer, everyday life is easier for us. This project is proposed for people those who are using public transport for daily commuters in Tamil Nadu. Even though the automobile industry has been developed in India still many of the commuters are depend on public transport which is the budget friendly way in metropolitan cities and college students. But in morning time it is difficult to get a ticket in the crowd. Daily we need a proper chance for our transport. Even bus pass renewal also in manual process. This manual process requires man power and consumes more time. Also, user needs to go bus depot on the particular date and time to apply with required details with in due-date. If they fail to appear with in due-date they can't apply. To avoid such difficulties, this service rectifies those problems. It will help to save their time without standing in a line for hours in counters.




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9 CONCLUSIONS AND FUTURE ENHANCEMENT

CONCLUSION

This project is useful for the students who are facing problems with the current manual process of bus pass registration and renewal. It will send an email for the students before completion of his validity period. We provide two kinds of bus pass instead of earlier service in manual system and employees. One is 30 days bus pass and other is 45 days bus pass. This project has highly secured payment gateway. It is user friendly and very easy to handle with simple implementation. This project stores all the activity of the users in a database and also works in light-weight process. In future we are going to implement QR code service and provide high security with user friendly. Also provide fully automated system like after done the payment bus pass generated automatically and send to the required user mail ID.

FUTURE ENHANCEMENT

Customers can buy bus tickets over the internet 24 hrs a day throughout the week, this solves issue of the bus ticket being misplaced or stolen. In addition, the online system lets the customer check the availability of the bus ticket before they buy the bus ticket. Furthermore, customers no need pay cash to buy bus ticket because they can pay bus ticket using credit card.

Passengers first need to verify themselves the system using various address and photo proofs. Once verified system allows them to book passes any route online.



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Online Learning Web Application

A MINI PROJECT REPORT



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ABSTRACT

- E-learning fulfils the thirst of knowledge and offers online content that can be delivered for the learner at anywhere, any time and any age through a wider range of e-learning solutions while compared with traditional learning system.
- It also allows for quick access to specialized knowledge and data. The learning approach has altered as a result of the rapid increase of numerous knowledge sources and the time constraints.
- Rather than teaching and learning by hand, learners receive knowledge using e-learning technologies.
- The e-learning management system with web services oriented framework and SOA is proposed in this Research study.
- This solution is cross-browser compatible and fully integrated with many databases.
- The characteristics of this system were Content Management, Content Protection, Learning Management, Delivery Management, Evaluation Management, and Access Control.



CONCLUSION

- In culmination, a comparative study between classroom study and online study was carried out.

The study was done by examining the findings recorded in books and journals on the applicability of online learning to students. The study revealed that, online learning has many benefits as compared to the conventional learning in the classroom environment.

- Though online learning has several challenges such as lack of feedback from students and lack of the proper technology to effectively conduct online learning, these limitations can be overcome by upgrading the E-learning systems and the use of online discussion forums and new web-based software's.
- In conclusion, online learning is beneficial to the students, tutors and the institution offering these courses. I would therefore recommend that online learning be implemented on all learning institutions and research on how to improve this learning process should be carried out.




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CRYPTO CURRENCY ANALYSIS WITH RANDOMALGORITHM USING POWER BI

PROJECT REPORT

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ABSTRACT

Power BI has taken the world of business intelligence, data visualization and analytics by storm. Power BI is an online service that enables searching data, transforming it, visualizing it, and sharing the developed reports and dashboards with other users in the same or different department/organizations or even with the general public. As of February 2017, more than 200,000 organizations across 205 countries are using Power BI. Power BI is having a free option that has adequate features and functionality. One of the innovative features of Power BI is its Quick Insights feature (Michael Hart, 2017) that is built on a growing set of advanced analytical algorithms.

The above paragraph describes our project by the built dashboard which is made up of data that is collected from "Julco" website, which is full of Cryptocurrency data analysis, by this someone can predict the amount of cryptocurrency been sale by the bitcoins and also it can be shown in the various strategies like how much dollar been spend to buy the bitcoins.

Key Words: Power BI, Power Query, Power Pivot, Power View, SSIS, SSAS, SSRS, DAX, Dashboard, Reports



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CONCLUSION

It helps us to know the increase of amount in term of coin. The data get analyzed and view through power BI. Conclusion, through this project the government can make the right decision, they can able to analyses the data in various stage like. All the coins in terms of dollar spend to buy the coin.

2.2 Future Enhancement

If the government is taking of the digital money and if they have idea of get into cryptocurrency. Then this dashboard will help them to make the correct decision.

By this project the government can able to predict the details of bitcoins as per the season and date.

If the government have an idea of taking of digital money and putting on cryptocurrency. Then, they can able see some protection in terms of bitcoins

“The Greatest Asset of a country is its money”




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DETECTION OF CYBERBULLYING ON SOCIAL MEDIA USING MACHINE LEARNING

PROJECT REPORT

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ABSTRACT

Cyberbullying is a major problem encountered on internet that affects teenagers and also adults. It has lead to mishappenings like suicide and depression. Regulation of content on Social media platorms has become a growing need. The following study uses data from two different forms of cyberbullying, hate speech tweets from Twittter and comments based on personal attacks from Wikipedia forums to build a model based on detection of Cyberbullying in text data using Natural Language Processing and Machine learning. Three methods for Feature extraction and four classifiers are studied to outline the best approach. For Tweet data the model provides accuracies above 90% and for Wikipedia data it gives accuracies above 80%.




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CONCLUSION AND ENHANCEMENT

7.1 Conclusion

Cyber bullying across internet is dangerous and leads to mishappenings like suicides, depression etc and therefore there is a need to control its spread. Therefore cyber bullying detection is vital on social media platforms. With availability of more data and better classified user information for various other forms of cyber attacks Cyberbullying detection can be used on social media websites to ban users trying to take part in such activity In this paper we proposed an architecture for detection of cyber bullying to combat the situation. We discussed the architecture for two types of data: Hate speech Data on Twitter and Personal attacks on Wikipedia. For Hate speech Natural Language Processing techniques proved effective with accuracies of over 90 percent using basic Machine learning algorithms because tweets containing Hate speech consisted of profanity which made it easily detectable. Due to this it gives better results with BoW and Tf-Idf models rather than Word2Vec models However, Personal attacks were difficult to detect through the same model because the comments generally did not use any common sentiment that could be learned however the three feature selection methods performed similarly. Word2Vec models that use context of features proved effective in both datasets giving similar results in comparatively less features when combined with Multi Layered Perceptrons.



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FACE RECOGNITION ATTENDANCE SYSTEM

MINI PROJECT REPORT

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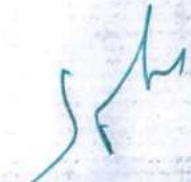


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ABSTRACT

The objective and scope of the Project is to Face Recognition Based Attendance System. the details and various activities of the user. It simplifies the task and reduces the paperwork. In this project, we are reducing the paperwork which is done by giving the Face Recognition Based Attendance System . We are providing the Software From Face Recognition Based Attendance System. Admin is monitoring all the user and system. In this project, the only faculty ie, Faculties is approving the user Face Recognition Based Attendance System.And Faculties Have Only Specific Password. The system is very user-friendly and it is Tkinder Python Based Working the system are easily accessed by administrators, Faculties. This Software Based On Artifical Intelligent ,Python And Using Software From Tkinder.




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CONCLUSION

The mini project is a simple and time efficient Face Recognition Based Attendance System system for Attendance of JCT college of Engineering and Technology. Here Attendance can be generated to Students Attendance Details From the received From The Faculites. Software notifies us about the decision Of Faculits and we can proceed further . The accepted copies can be seen by logging in and can be shown to the CSV File. Thus our Attendance Report is generated . Thus this Software becomes very helpful for Faculities .



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JCT

**HUMAN COMPUTER
INTERACTION(HCI) THROUGH EYE-GAZE
TECHNOLOGIES BASED ON IMAGE PROCESSING**

A PROJECT REPORT

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ABSTRACT

Eye movement can be regarded as a pivotal real-time input medium for human-computer communication, which is especially important for people with physical disability. In order to improve the reliability, mobility, and usability of eye tracking technique in user-computer dialogue, a novel eye control system with integrating both mouse and keyboard functions is proposed in this paper. The proposed system focuses on providing a simple and convenient interactive mode by only using user's eye. The usage flow of the proposed system is designed to perfectly follow human natural habits. Additionally, a magnifier module is proposed to allow the accurate operation. In the experiment, two interactive tasks with different difficulty (searching article and browsing multimedia web) were done to compare the proposed eye control tool with an existing system. The Technology Acceptance Model (TAM) measures are used to evaluate the perceived effectiveness of our system. It is demonstrated that the proposed system is very effective with regard to usability and interface design.

KEYWORDS

Eye Gaze, TAM (Technology Acceptance Model), Mouse Functions, Eye Tracking




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II. CONCLUSION

In order to make user interact with computer naturally and conveniently by only using their eye, we provide an eye tracking based control system. The system combines both the mouse functions and keyboard functions, so that users can use our system to achieve almost all of the inputs to the computer without traditional input equipment. The system not only enables the disabled users to operate the computer the same as the normal users do but also provides normal users with a novel choice to operate computer. According to our TAM questionnaire analysis, the participants considered our eye movement system to be easy to learn. Meanwhile, participants show their interest in using the proposed eye control system to search and browse information. They are looking forward to see more of our research results on the use of eye tracking technique to interact with the computer.

In browsing experiment, the proposed system improves the browsing efficiency and experience, and with the system user can interact with multimedia with little effort. Comparing with the previous system, the participants generally prefer to use our virtual mouse system in system interface design and operation experience. The proposed system is shown to be more effective and time saving than the compared system according to the objective evidence. In the SUS questionnaire section, the participants consider that the system is of high integration functions in a simple way. In addition, the operations of the system are easy to learn and use in the integration with Internet and multimedia. Currently, this system is applied for the general operating behavior to interact with computer by simulating mouse and keyboard. In future, we will try to add new operation functions for more usage situations for users to communicate with media and adjust our system on new platform, such as tablet or phone. We will also develop series operation modules in order to achieve a complete operating experience for users from turning on to turning off the computer.



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WEB DEVELOPMENT

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ABSTRACT

- Web development is the work involved in developing a website for the Internet (World Wide Web) or an intranet (a private network).
- Web development can range from developing a simple single static page of plain text to complex web applications, electronic businesses, and social network services.



A handwritten signature in blue ink, consisting of a stylized 'S' followed by a cursive 'h'.

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CONCLUSION

Internet is the worldwide interconnection of individual networks operated by many people including government, industries and private parties.

Almost everything is made possible through the internet including research, shopping, communication and teaching.

Among the many fields included, the Business has changed dramatically with the use of internet. In a matter of years the internet has consolidated itself as a very powerful platform that has changed the way people do business. The evolution in internet has made it possible for many businesses to globalize by giving the businesses a worldwide market for their products. Today, a business cannot be completed without its website giving a complete review of the business and its products.

The internet has made it possible for the business to do online marketing and selling their products online and ship them to their customer's doorsteps. From a busy working schedule people do not find the time and energy to go shopping or go anyplace to get services. Thus studies show that many of the households are adopting the use of internet for shopping and other services.

Internet helps a business's productivity and profitability. Effective use of the internet helps a business communicate more efficiently with customers and even attract new customers. Online networking sites such as discussion boards, social networking sites and chat rooms helps the business stay in contact with their customers. This reduces the cost of



ATM SYSTEM

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ABSTRACT

The ATM System is the project which is used to access their bank accounts in order to make cash withdrawals. Whenever the user needs to make cash withdrawals, they can enter their PIN number (personal identification number) and it will display the amount to be withdrawn in the form of 50's, 100's and 500's. Once their withdrawal was successful, the amount will be debited in their account. The ATM System is developed in VB.Net and back-end database as Microsoft Access. VB.Net is one of the powerful versions of Framework and object-oriented programming. Hence we use this software in our project. The ATM will service one customer at a time. A customer will be required to enter ATM Card number, personal identification number (PIN) – both of which will be sent to the database for validation as part of each transaction. The customer will then be able to perform one or more transactions. Also, a customer must be able to make a balance inquiry of any account linked to the card. The ATM will communicate each transaction to the database and obtain verification that it was allowed by the database. In the case of a cash withdrawal, a second message will be sent after the transaction has been physically completed (cash dispensed or envelope accepted). If the database determines that the customer's PIN is invalid, the customer will be required to re-enter the PIN before a transaction can proceed. If a transaction fails for any reason other than an invalid PIN, the ATM will display an explanation of the problem, and will then ask the customer whether he/she wants to do another transaction. The ATM will provide the customer with a printed receipt for each successful transaction, showing the date, time, machine location, type of transaction, account(s), amount, and ending and available balance(s) of the affected account ("to" account for transfers).




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Future Enhancements

- Email and mobile alerts
- Loan Facility
- Active Tracing of Fraudulent activities
- Security upgrades like Visual Sensors with burglar alarms, Biometric Identification procedures etc.

Additional Features

Double Layered Security

Secure Login



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PREDICTING DIABETES USING MACHINE LEARNING

PROJECT REPORT

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ABSTRACT

We aim to develop an prediction system using machine learning to detect and classify the presence of diabetes in e-healthcare environment using Ensemble Decision Tree Algorithms for high feature selection. A significant attention has been made to the accurate detection of diabetes which is a big challenge for the research community to develop a diagnosis system to detect diabetes in a successful way in the e-healthcare environment. The existing diagnosis systems have some drawbacks, such as high computation time, and low prediction accuracy. To handle these issues, we have proposed diagnosis system using machine learning methods, such as preprocessing of data, feature selection, and classification for the detection of diabetes disease in e- healthcare environment. Model validation and performance evaluation metrics have been used to check the validity of the proposed system. We have proposed a filter method based on the Decision Tree algorithm for highly important feature selection. Two ensemble learning Decision Tree algorithms, such as Ada Boost and Random Forest are also used for feature selection and compared the classifier performance with wrapper based feature selection algorithms also. Machine learning classifier Decision Tree has been used for the classification of healthy and diabetic subjects. The experimental results show that the Decision Tree algorithm based on selected features improves the classification performance of the predictive model and achieved optimal accuracy. Additionally, the proposed system performance is high as compared to the previous state-of-the-art methods. High performance of the proposed method is due to the different combinations of selected features set. Furthermore, the experimental results statistical analysis demonstrated that the proposed method would be effectively detected diabetes disease.

Key Words: Diabetes, Ada Boost, Random Forest, Machine Learning, e-Healthcare



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CHAPTER 7

CONCLUSION

7.1 Conclusion

Machine Learning has emerging role in healthcare services which delivers a system to analyze the medical data for diagnosis of diseases applied data mining methods. In the successful detection of diabetes disease is a critical medical issue for medical experts and researchers. To tackle this problem, we have proposed a IOT based e-healthcare system for the detection of diabetes using ML datamining techniques. In the proposed method, we have used DT (ID3) algorithm for features selection as features selection is necessary for effective training and testing of the classifier. Additionally, ensemble learning DT Feature selection algorithms ADA-BOOST and RANDOM FOREST are also used for feature selection. DT machine learning classifier has been used for the detection of diabetes. The DT has no need for extra parameters during the training and testing process. Additionally, we used different cross-validation techniques to validate the predictive model, such as train/Test splits, k-fold, and LOSO. To check the model classification performances various performance evaluation metrics have been used in this study, such as accuracy, specificity, sensitivity, MCC, ROC-AUC, precision, recall, F1-score and execution time. The diabetes disease dataset used to check the proposed method. The experimental results analysis demonstrated that the proposed feature selection algorithm Filter Based DT (ID3) selects more suitable features and classifier DT achieved good performances on these selected features as compared to feature sets selected by ADA-BOOST and RANDOM FOREST algorithms. The Features GL, DPF and BMI are more significantly important features in dataset and have great influence in the detection of diabetes disease and all features selection algorithms select these features. The feature ST has an impact in the detection of diabetes disease





BOREWELL RESCUE ROBOT USING ARDUINO

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ABSTRACT

In recent times we have gone through many incidents of children falling into bore-wells. Usually the rescue team digs a big hole parallel to the bore-well which takes almost 20-60hrs. Then trained army person will move inside the bore-well and rescue the child. In such cases, a small delay may reduce the chances of saving the child alive. To overcome the issues, we have proposed a system called "bore-well rescue robot", in which the robot can move inside the bore-well and rescue the child safely. This project is easily portable and less expensive which can be used in any situation to rescue the child safely and also in less time.



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CONCLUSION

At present, instruments or devices to rescue the child who stuck in the borewell is not available in the fire stations because of lack of efficiency and possible of failures in existing instruments. So, we designed a robot which is of high efficiency in rescuing the robot and there is no possibility of failures while rescuing. Also, it is cost effective so that the needed persons could afford it easily. The device can be controlled easily. It have live camera feed which can be used to locate the child stuck in the borewell. Through this we can safe guard the child without any possibilities of failure and injury.




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JCT

REAL TIME PEDESTRIAN DETECTION

PROJECT REPORT

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ABSTRACT

Object detection is the process of determining the presence, location, and type or class of at least one object using a bounding box. The person detection process produces a bounding box and allot a class label as a person based on YOLO v3. In YOLO v3 the features are learned, divides the image cells and each cell says a bounding box and entity classification directly. There could be more than one bounding box per person, but the system makes use of non-maximum suppression to reduce the number of bounding boxes to one per person. Finally, the number of persons in the image and video are calculated using the count of the bounding boxes. The data set used for static pedestrian detection is the INRIA data set and Shanghai Tech data set. YOLO Mark is used for marking bounding boxes of persons and gets its annotation files using 243 images from the INRIA data set. Dark net is used as the framework for implementing YOLOv3. From INRIA Data set 120 images are used for testing purposes. Testing on the INRIA data set resulted in an accuracy of 96.1%. From the Shanghai tech-B, data set 56 images are used for testing. Testing resulted in an accuracy of 87.3%.



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7.1 Conclusion

Object detection decreases human endeavors in numerous fields. YOLO based Convolutional Neural Network group of models for object detection and the most recent version is called YOLOv3. Pedestrian detection and counting using YOLO v3 fastest, and one of the most accurate algorithms. The efficiencies of the yolov3 system are the greatest advantage of it, as the system only needs to go over the input only once. The results obtained in person detection using yolov3 is one of the best among the existing systems. The time taken by the system to produce the output is much less than the existing ones. Detections at 3 layers helps to address the issue of detecting very small objects compared to the previous versions of YOLO. The testing on the Inria dataset resulted in an accuracy of 96.1% whereas that on the ShanghaiTech dataset is comparatively less at 82.1% as the images are crowded.

7.2 Future Enhancement

The algorithm detects the persons whose full body is included in the frame, which degrade the accuracy in crowded scenes, which could be improved in the future. It can't detect duplicates when someone re-enters into the frame the person has counted again as a new person. The algorithm could be extended to overcome this problem. The training could be extended to detect persons using the head for better handling of crowded inputs. Slightest improvements in these algorithms can improve accuracy



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ROAD SAFETY AND ACCIDENT PREVENTION SYSTEM

A MINI PROJECT REPORT

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ABSTRACT

The main idea behind this project is to develop a nonintrusive system which can detect fatigue of any human and can issue a timely warning. Drivers who do not take regular breaks when driving long distances run a high risk of becoming drowsy a state which they often fail to recognize early enough. According to the expert's studies show that around one quarter of all serious motorway accidents are attributable to sleepy drivers in need of a rest, meaning that drowsiness causes more road accidents than drink-driving. This system will monitor the driver eyes using a camera and by developing an algorithm we can detect symptoms of driver fatigue early enough to avoid the person from sleeping. So, this project will be helpful in detecting driver fatigue in advance and will give warning output in form of alarm and pop-ups.

Moreover, the warning will be deactivated manually rather than automatically. For This purpose, a de- activation dialog will be generated which will contain Some Simple mathematical operation which when answered correctly will dismiss the warning. Moreover, if driver feels drowsy there is possibility of incorrect response to the dialog. We can judge this by plotting a graph in time domain. If all the three input variables show a possibility of fatigue at one moment, then a Warning signal is given in form of text and sound. This will directly give an indication of drowsiness/fatigue which can be further used as record of driver performance.

Keywords- Drowsiness, Supervised Learning, Unsupervised Learning, Machine Learning.



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Chapter 6

Conclusions

A real-time eye blink detection algorithm was presented. We quantitatively demonstrated that Haar feature-based cascade classifiers and regression-based facial landmark detectors are precise enough to reliably estimate the positive images of face and a level of eye openness. While they are robust to low image quality (low image resolution in a large extent) and in-the-wild.

Limitations:

Use of spectacles: In case the user uses spectacle then it is difficult to detect the state of the eye. As it hugely depends on light hence reflection of spectacles may give the output for a closed eye as opened eye. Hence for this purpose the closeness of eye to the camera is required to avoid light.

Multiple face problem: If multiple face arises in the window then the camera may detect more number of faces undesired output may appear. Because of different condition of different faces. So, we need to make sure that only the driver face come within the range of the camera. Also, the speed of detection reduces because of operation on multiple faces.



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SMART FARMERS MANAGEMENT SYSTEM USING ASP AND SQL

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ABSTRACT

In today's agriculture and the food supply chain in general, there appears a history of quick adoption and assimilation of new technologies, especially cost reduction technologies. In the development process of electronic commerce of agricultural products, many new innovative technologies have been emerged. It connects the gap between the availability of agricultural input and delivery of agricultural outputs and agriculture infrastructure. E-commerce involves use of the Internet to market, buy and sell goods and services, exchange information, and create and maintain web-based relationships between contributor entities. Our project aims to help farmers as well as customers for buying and selling agricultural products across the country using a computerized approach. The application builds a platform for farmers to ensure greater profitability through end user communication. In developed markets, is the online bulk orders of fresh quality of the product is already a common practice among the facilities such as hotels and restaurants. The consumer market for on-line orders, it will also start to come into play, as it grows. This project allows viewing various products available, and enable users to purchase desire products instantly by online payment. The study utilized micro-survey data from 686 households in the leading kiwifruit-producing area as the empirical setup. The findings illustrated that the village environment is the main factor that restricts farmers' e-commerce sales behaviour, among which the infrastructure and policy environments have a significant contribution to farmers' e-commerce sales intention and behaviour. However, the effect of capital endowment on farmers' e-commerce selling behaviour has been found as significant. The village environment significantly affects both large- and small-scale farmers, and the capital endowment has a higher binding effect on small-scale farmers. Therefore, the paper suggests that improving the village environment for e-commerce development and laying the foundation for e-commerce development should be fostered. A differentiated incentive mechanism to improve the capital endowment of farmers should be constructed. A well-structured capital endowment triggering small farmers to capture the benefits of e-commerce sales should be imposed.



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CONCLUSION

The part of our system has been developed with much care that it is Free of errors and at the same time it is efficient and less time consuming. The important thing is that the system is robust. We have tried our level best to make the site as dynamic as possible. Also, provision is provided for future developments in the system. The entire system is secured. This online system is made keeping in mind all pros and cons. The internet has become major source in modern business, thus electronic shopping has gained significance not only from the entrepreneur's but also from the customer's point of view. For the entrepreneur, electronic shopping generates new business opportunities and for the customer, it makes comparative shopping possible. As per the survey, most consumers of online stores are impulsive and usually make a decision to stay on a site within the first few seconds. We have designed the project to provide the user with easy navigation, retrieval of data and necessary feedback as much possible. A good design must be accompanied with a user-friendly application logic. It should be convenient for the customer to view the contents of their page and to be able to update information in their interface. The features are designed for the customer to make them more comfortable. This project helps in understanding the creation of an interactive web page and the technologies used to implement it. The building of the project has given us the idea and a precise knowledge about how the application can be developed, how it connects to the database and how the data and web pages are modified as required. The main motive for the project was to provide dynamic online farmers' management system to help farmers in every possible way and provide them a stable platform where they can perform every transaction with ease.




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Student Online Voting System

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ABSTRACT

The aim of this proposed project is to make the democratic process simple for the students at the college level. The secure online voting system is the need of today's era. Presently in our college, vote casting is performed by utilizing paper and counting is done manually so it expends students as well as educators valuable time, also there can be a possibility of error while tallying the cast votes. All this makes the vote casting process very dreary so in our project, the vote capturing and tallying is done on the web. All user interaction is performed remotely through the user's web browser. It saves processing time, avoids human errors and there won't be any invalid votes. It has a basic user interface of application which attracts users. Users are provided with an online registration form before voting user should fill online form and submit details these details are compared with details in database and if they match then user is provided with username and password using this information user can login and vote. If conditions are not correct entry will be canceled. We propose a new secure authentication for online voting system by using steganography. As this application is planned for students so verification happens on the basis of unique ID code which is the students registered ID, with this goal the students can cast their votes remotely from anyplace.

Keyword: Online Voting, HTML 5, CSS, JavaScript, Python, JQuery




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CONCLUSION

The mini project is a simple and time efficient online voting system for college students . Our proposal enables a voter to cast his/her vote through internet without going to voting booth and additionally registering himself/herself for voting in advance, proxy vote or double voting is not possible, fast to access, highly secure, easy to maintain all information of voting, highly efficient and flexible.

The using of online voting has the capability to reduce or remove unwanted human errors. In addition to its reliability, online voting can handle multiple modalities, and provide better scalability for large elections.




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PROVIDING SPECIFIC FACILITIES IN EVERY TOURIST PLACES TO USE THIS WEBSITE

A MINI PROJECT REPORT

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ABSTRACT

- ❖ The Project Provides us the information about the Tourist Place in Bihar.
 - ❖ Gives and Shows results status and information about Tourist Places.
 - ❖ The System must provide the flexibility of generating the required document on screen as well as Print when Required.
 - ❖ Also contributes towards reduction of Paper Works.
-
- ❖ As tourism is one of the fastest growing industries today, thus within the tourism industry events are getting more and more important. People have become more interested in events of all kinds, and will travel far away to participate in events that they find interesting.
 - ❖ Events can offer various economical and social benefits for destinations, and therefore destination managers can and should employ events effectively in a tourism role. It has become widely accepted that every community and destination needs to adopt a long-term, strategic approach to event tourism thereby planning and development in order to realise the full tourism potential of events.
 - ❖ This study was launched as a response to the lack of studies on how event tourism strategies are actually used in destinations. The study was directed to four Nordic tourism organisations, and the aim was to explore how these organisations work strategically with events. The main findings of the study indicate that although tourism organisations have increasingly realised the potential and importance of events, the extent to which events are used strategically in tourism organisations varies. Some tourism organisations have integrated events deep into their overall tourism strategies, and events form their own business area and have their own business strategy.



FUTURE ENHANCEMENT

Tourism is growing and so is the scope in tourism increasing. There is a good employment in the tourism sector. Thus too grab such opportunities you need to prepare yourself with the knowledge in tourism.

- Any tourist agency can make use of it for saving customer details in database.
- Tourism group can use it for managing their location, hotel, vehicles details.
- This application can easily implemented under various situations.
- We can add new features as and when we require.
- Reusability of this application is also possible




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PROVIDING SPECIFIC FACILITIES IN EVERY STUDENT'S AND EMPLOYEES TO USE THIS WEBSITE

AMINIPROJECTREPORT

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ABSTRACT

Student attendance management system project used to maintain and track student attendance record for any organization. The main objective of this project is provide all functionality related to student attendance so all student attendance will be manage by admin it tracks all the information and details of the student attendance.



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CONCLUSION

An attendance management system is used to track and monitor employees' attendance. An employer uses this attendance management system to track their employees' working hours, their arrivals, early departures, break time, and absenteeism. The advantages of using an attendance management system include enhanced productivity, cost savings, and legal compliance.

An organization's technique of tracking employee time and attendance information is referred to as an attendance management system. An accurate attendance and time tracking system can save you time and effort. The attendance system is used to track employee attendance and mobility during working hours, as well as to produce materials for salary processing.



A handwritten signature in blue ink, consisting of a stylized 'S' followed by a cursive 'h'.

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ONLINE TOLLGATE PAYMENT USING WIRELESS SENSOR

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ABSTRACT

The user has to register his/her number and when they need they can make the payment for the tollgates through online. Once the source and destination is selected the number of tollgates is listed and the payment is done. In all the tollgates where the user has made the payment, the number plate of the vehicle is detected automatically and is allowed to travel further.

The growing number of vehicles in major cities, toll plaza is an option for smooth transportation. The increasing use of toll roads will be followed by the increase in highway infrastructure to support optimum service to user. Toll plazas play a vital role in maintaining the road transportation. Due to manual intervention, the processing time at toll plaza is highest. Traffic congestion at toll plazas leads to huge economical loss in terms of fuel wastage and also causes pollution. Online toll payment system developed for lessening the over congestion in toll plazas that has become part of metropolitan cities these days. When this application is used 1km before the toll plazas notification will be sent to the mobile phone of the approaching user with toll name and applicable toll fee.




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CHAPTER 7

CONCLUSION AND FUTURE ENHANCEMENT

CONCLUSION

The electronic toll collection system in expressway based on RFID, a design scheme was put forward. It has characteristics of low cost, high security, far communication distance and high efficiency, etc. It not only can improve technology level of charge, but also improve passage ability of expressway. Electronic toll collection system is an effective measure to reduce management costs and fees, at the same time, greatly reduce noise and pollutant emission of toll station. In the design of the proposed Electronic toll collection (ETC) system, real time toll collection and anti-theft solution system have been designed. This reduces the manual labour and delays that often occur on roads. This system of collecting tolls is eco-friendly and also results in increased toll lane capacity. Also an anti-theft solution system module which prevents passing of any defaulter vehicle is implemented, thus assuring security on the roadways.




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ONLINE SHOPPING SITE A MINI PROJECT REPORT

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ABSTRACT

The Online Shopping is a web based application intended for online retailers. The main objective of this application is to make it interactive and its ease of use. It would make searching, viewing and selection of a product easier. It contains a sophisticated search engine for user's to search for products specific to their needs. The search engine provides an easy and convenient way to search for products where a user can Search for a product interactively and the search engine would refine the products available based on the user's input. The user can then view the complete specification of each product. They can also view the product reviews and also write their own reviews. The application also provides a drag and drop feature so that a user can add a product to the shopping cart by dragging the item in to the shopping cart. The main emphasis lies in providing a userfriendly search engine for effectively showing the desired results and its drag and drop behavior.



A handwritten signature in blue ink, consisting of stylized, overlapping loops and lines.

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CONCLUSION

Technology has made significant progress over the years to provide consumers a better online shopping experience and will continue to do so for years to come. With the rapid growth of products and brands, people have speculated that online shopping will overtake in-store shopping. While this has been the case in some areas, there is still demand for brick and mortar stores in market areas where the consumer feels more comfortable seeing and touching the product being bought. However, the availability of online shopping has produced a more educated consumer that can shop around with relative ease without having to spend a large amount of time. In exchange, online shopping has opened up doors to many small retailers that would never be in business if they had to incur the high cost of owning a brick and mortar store. At the end, it has been a win-win situation for both consumer and sellers.



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HUMAN RESOURCES ANALYSIS WITH
FORECASTING ALGORITHM
USING POWER BI

PROJECT REPORT

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ABSTRACT

Power BI has taken the world of business intelligence, data visualization and analytics by storm. Power BI is an online service that enables searching data, transforming it, visualizing it, and sharing the developed reports and dashboards with other users in the same or different department/organizations or even with the general public. As of February 2017, more than 200,000 organizations across 205 countries are using Power BI. Power BI is having a free option that has adequate features and functionality, One of the innovative features of Power BI is its Quick Insights feature (Michael Hart, 2017) that is built on a growing set of advanced analytical algorithms.

This project is based on the Analysis of Human Resources Dataset, Provided by 'Obvience'. To make the Analysis first get the data and it should run behind the ETL (Extract, Transaction, Load) tool which is SSIS (SQL server Integration Service). The data should get modified into Power BI tool which in power Query, Then get the Modified data and get loaded into power pivot which is SSAS (SQL server Analysis services), Then make the relationship between the table by the primary key and foreign key. After the data get related then push the data into power view to make it visualize with chart, graph and map This process is called SSRS (SQL server Reporting services).

Key Words: Power BI, Power Query, Power Pivot, Power View, SSIS, SSAS, SSRS, DAX, Dashboard, Reports



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CONCLUSION & ENHANCEMENT

Conclusion

R In this proposed system by the use of Forecasting Algorithm the HR can able to predict the Particular Employee information in various stage like new hires in last month, How much the rate has given for the employee interms of Performance etc.,

Finally the proposed project is all about HR dataset analysis. Through this project HR can make the right decision among the employee and also He can Analyses and predict the particular stage of any employee in terms of activity by this project HR can make the employee in various stage of Analyses.

Future Enhancement

But one disadvantage is If the HR want to Analyze the information of any employee in terms of his own company then he should push the data of employee to the power Query by the same column name .other then it's a well designed project for the future purpose like The company can get growth in terms of Had a good Employee.

—The Greatest Asset of a company is its people




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BABY HEALTH CARE DELIGANCE

A MINI PROJECT REPORT

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ABSTRACT

With the continuous development of BabyHealthcare systems, medical service recommendation has received great attention. However, although it can recommend doctors to users, there are still challenges in ensuring the accuracy and privacy of recommendation. In this paper, to ensure the accuracy of the recommendation, we consider doctors' reputation scores and similarities between users' demands and doctors' information as the basis of the medical service recommendation. The doctor's reputation scores are measured by multiple feedbacks from users. Online medical service recommendation has become an indispensable part of daily life, due to the rapid development of BabyHealthcare industry. In a medical service recommender system, users submit their demands to the medical server, and then the medical server will recommend the suitable doctors according to the demands of the users. A series of existing studies have made efforts to design the recommendation systems discovery and recommendation process. To solve these problems, it is critical to propose an accurate medical service recommendation scheme based on both similarity and reputation scores, in which it cannot only meet the basic demands of users, but also recommend doctors with high reputation scores to the user, so that the user can obtain a good quality of medical services. At the same time, the system should also identify and filter malicious user's feedback, either it is positive or negative.




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CONCLUSION

There are lot of challenges in the maintenance of patient records in the current system maintained by the Health care providers. They are usually maintained manually and most the patient database or history is not easily accessible to doctors and affects the quality of patient care and repeated prescribing or tests affecting the quality of health care provided and increase in cost and time of treatment. It is easy for a person with criminal intent to hack and to access all the sensitive information and exploit it to the outside world. It is very important to have a highly secured database especially when containing highly confidential information. Patients might not disclose their actual health issues for the fear of losing their privacy and security of their health related information. This project helps in solving the above problem in a more efficient, and price deductive manner with a sole objective of reducing the time and resources which are required for such tasks so the required institution resources may be efficiently utilized.



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ONLINE MEAL

A MINI PROJECT REPORT

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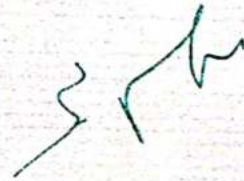


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ABSTRACT

My Online Meal is a website designed primarily for use in the food delivery industry this system will allow hotels and restaurants to increase swop of business by reducing the labor cast involved. The system also allows to quickly and easily manage an online menu which customer Can browser and use to place orders with just few just click restaurant employees then use these Ordered though an easy to navigate graphical instance for efficient processing



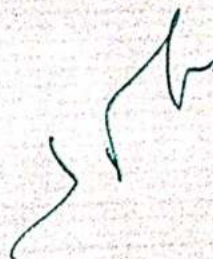
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CONCLUSION

An online food ordering system is developed where the customers can make an order for the food and avoid the hassles of waiting for the order to be taken by the waiter. Using the application, the end users register online, read the E-menu card and select the food from the e-menu card to order food online. Once the customer selects the required food item the chef will be able to see the results on the screen and start processing the food. This application nullifies the need of a waiter or reduces the workload of the waiter. The advantage is that in a crowded restaurant there will be chances that the waiters are overloaded with orders and they are unable to meet the requirements of the customer in a satisfactory manner. Therefore by using this application, the users can directly place the order for food to the chef online.

In conclusion an online food ordering system is proposed which is useful in small family run restaurants as well as in



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ONLINE VOTING SYSTEM

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May 2022



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JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.

ABSTRACT

- This is for expand the technology from manual voting system to digital voting system.
- In this research work, Voting is commonly related to politics and is finished with often exploitation and manual approach where voters stand to vote for his or her decisions.
- is model a person can also vote from outside of his/her In tallotted constituency or from his/her preferred location. In the proposed system the tallying of the votes will be done automatically, thus saving a huge time and enabling Election Commissioner of India to announce the result within a very short period.
- The proposed model has a greater security in the sense that voter high security password is confirmed before the vote is accepted in the main database of Election Commission of India.
- The automated ballot elections are called the electronic voting. The online voting system is highly developed and the online polling system can be replaced by accurately and directly voting online and immediate results. The online voting system is done by the internet so it can be called the Internet Voting.



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CONCLUSION

This Online Voting system will manage the Voter's information by which voter can login and use his voting rights. The system will incorporate all features of Voting system. It provides the tools for maintaining voter's vote to every party and it count total no. of votes of every party. There is a DATABASE which is maintained by the ELECTION COMMISSION OF INDIA in which all the names of voter with complete information is stored.

In this user who is above 18 year's register his/her information on the database and when he/she want to vote he/she has to login by his id and password and can vote to any party only single time. Voting detail store in database and the result is displayed by calculation. By online voting system percentage of voting is increases. It decreases the cost and time of voting process. It is very easy to use and It is vary less time consuming. It is very easy to debug.

REFERENCES

Websites

- www.w3schools.com
- www.youtube.com
- www.stackoverflow.com
- www.tutorialspoint.com



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PICCHANUR, COIMBATORE - 641 108.



JCT

**RESUME SCREENING USING
TERM FREQUENCY-INVERSE DOCUMENT
FREQUENCY(TECHNIC)**

PROJECT REPORT

Submitted by,

SHILPA S (720918104039)

ANAMIKA P (720918104007)

SANTHOSH SIVAN N (720918104037)

KAMALAKKANNAN R (720918104016)

In partial fulfillment for the award of the degree

of,

BACHELOR OF ENGINEERING

In

COMPUTER SCIENCE AND ENGINEERING

**JCT COLLEGE OF ENGINEERING AND TECHNOLOGY, PICHANUR,
COIMBATORE**

ANNA UNIVERSITY: CHENNAI 600 025

JUNE 2022



PRINCIPAL

**JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 611 105.**

ABSTRACT

The goal of resume screening is to find the best candidates for a position. In order to match and rate candidates in real-time, the software must employ natural language processing and machine learning. Our system is a resume ranking software that uses natural language processing (NLP) and machine learning. Input would be resumes and job descriptions, output would be a highly ranked candidate's resume. Output results are explored instantly in real-time. We will be using NLP for doing matching, Cosine Similarity, TF-IDF. The existing systems are simple and effective but are not robust in terms of accuracy, efficiency and processing. Through the analysis of the works of literature on existing methods, it can be found that these are traditional systems that could lead to inaccurate assumptions and loss of human potential. We propose a web application that aims to order the resumes, by intelligently reading job descriptions as input and comparing the resumes which fall into the category of given Job Descriptions. In order to match and rate candidates in real-time, the software employs natural language processing. It provides a ranking after filtering and recommends the better resume for a given textual job description. The Advantages of the proposed system are Secured, Integrity, High accuracy, Lightweight model & fast processing, Real-time use cases. It could be used in MNC's where multiple resumes must be screened every single day for multiple jobs, government, and administrative offices.

Keywords: NLP, Machine Learning, Cosine similarity, TF-IDF, Exploratory Data Analysis, Latent Dirichlet Allocation



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7.1 CONCLUSION

Finding the relevant candidate's application from the pool of resumes is a tedious task for any organization nowadays. The process of classifying the candidate's resume is manual, time consuming, and waste of resources. To overcome this issue, an automated machine learning based model is introduced. This model recommends suitable candidate's resume to the HR based on given job description. This system will definitely aid the recruiters to filter out the most prospective candidates based on their resumes for further rounds in the hiring process. It will ease the burden of the recruiters and they will not have to manually view each and every resume of the large pool of candidates. This resume classifier application is used to automate the manual task of project allocation to the new recruits of the organization based on the interests, work experience, and expertise mentioned by the candidate in the profile. The Resume Screening System replaces ineffective manual screening, ensuring that no candidate is overlooked. The need for efficient and effective resume screening is at the heart of every excellent recruitment strategy. In this method, NLP methods, tf-idf and KNN algorithm are applied to rate resumes, assisting the firm in hiring the most qualified people.. Using NLP(Natural Language Processing) and ML(Machine Learning) to rank the resumes according to the given constraint, this intelligent system ranks the resume of any format according to the given constraints. The application automates the task of project allocation, thereby eliminating the tedious and redundant affair of opening and analyzing the resumes manually by the HR team of the organization.

7.2 FUTURE SCOPE

The method has a few limitations since it cannot be utilized as a sole criterion for choosing a candidate. In the future, a hybrid recommendation system that combines both. Collaborative Filtering Recommendation Systems and Content-Based Filtering Systems can be built using the candidate's academic score and MCQ test results. The implicit compression of the text due to summarizing may have resulted in the loss of essential information while creating a summary using the "genism" package. This summarization technique may be fine-tuned to guarantee minimum information loss.

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PICHANUR, COIMBATORE - 641 105.



Date:18/11/2021

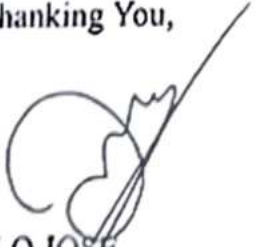
TO WHOM IT MAY CONCERN

This is certify that MR.THANGAMANI S JCT College Of Engineering And Technology , Coimbatore Course : (B.E.Computer Science & Engineering) has successfully Completed one month internship programme from 18-10-2021 to18-11-2021 at Nestsoft Technologies

During the course of internship he has trained in python Machine Learning.He had a self motvatd attitude to learn new things and was successfully able to launch the project on time

We Wish all the best for his future endeavors

Thanking You,


JILO JOSE
Project Leader
Nestsoft Technologies,Cochin







CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss YUVANSHANKAR E

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature

CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

THANGATHURAI

Mr/Miss

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
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16-10-2021

DATE



Signature

Date:18/11/2021

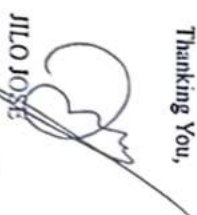
TO WHOM IT MAY CONCERN

This is certify that MR ANTO ASHOR G JCT College Of Engineering And Technology , Coimbatore Course : (B.E.Computer Science & Engineering) has successfully Completed one month internship programme from 18-10-2021 to18-11-2021 at Nestsoft Technologies

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We Wish all the best for his future endeavors

Thanking You,



JILO JOSE

Project Leader
Nestsoft Technologies,Cochin



CERTIFICATE OF EXCELLENCE

THIS IS TO CERTIFY THAT

ANISH KUMAR

Mr/Miss

a student of BE.CSE From ICT COLLEGE OF ENGINEERING AND TECHNOLOGY

has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021

programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021

DATE

Signature



Date:18/11/2021

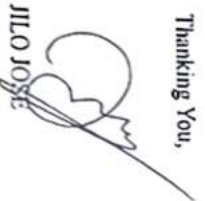
TO WHOM IT MAY CONCERN

This is certify that MR ARUN RAM K JCT College Of Engineering And Technology , Coimbatore Course : (B.E.Computer Science & Engineering) has successfully Completed one month internship programme from 18-10-2021 to18-11-2021 at Nestsoft Technologies

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We Wish all the best for his future endeavors

Thanking You,



JLO JOSE
Project Leader
Nestsoft Technologies,Cochin



CERTIFICATE OF EXCELLENCE

THIS IS TO CERTIFY THAT

SAURABH SUMAN

Mr/Miss

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY

has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021

programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021

DATE



Signature

CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss PANNER SELVAM

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
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16-10-2021
DATE



Signature

Date:18/11/2021

TO WHOM IT MAY CONCERN

This is certify that MR ASHICK S JCT College Of Engineering And Technology , Coimbatore Course : (B.E.Computer Science & Engineering) has successfully Completed one month internship programme from 18-10-2021 to18-11-2021 at Nestsoft Technologies

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We Wish all the best for his future endeavors

Thanking You,

JILO JOSE

Project Leader

Nestsoft Technologies,Cochin



Date:18/11/2021

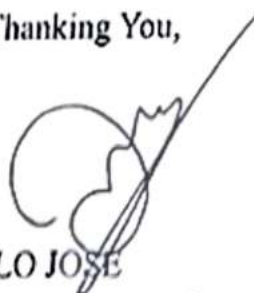
TO WHOM IT MAY CONCERN

This is certify that MRS.RAMYA S JCT College Of Engineering And Technology , Coimbatore Course : (B.E.Computer Science & Engineering) has successfully Completed one month internship programme from 18-10-2021 to 18-11-2021 at Nestsoft Technologies

During the course of internship he has trained in python Machine Learning.He had a self motvatd attitude to learn new things and was successfully able to launch the project on time

We Wish all the best for his future endeavors

Thanking You,



JILO JOSE
Project Leader
Nestsoft Technologies, Cochin



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

RAHUL KUMAR CHAUHAN

Mr/Miss _____

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
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Date: 18/11/2021

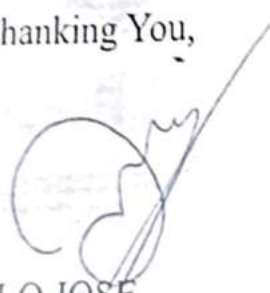
TO WHOM IT MAY CONCERN

This is to certify that **MS.ANUSHA**(JCT College Of Engineering And Technology, Coimbatore Course: B.E Computer Science & Engineering) has successfully completed one month internship programme from 18-10-2021 to 18-11-2021 at Nestsoft Technologies, Cochin.

During the course of internship, he has trained in Python Machine Learning. He had a self motivated attitude to learn new things and was successfully able to launch the project on time.

We wish all the best for his future endeavors.

Thanking You,


JILO JOSE

Project Leader
Nestsoft Technologies, Cochin





zindot.in

Certificate of Appreciation

This is to certify that

ADITHYA PS

student of

ICT COLLEGE OF ENGINEERING AND TECHNOLOGY

has successfully completed 15 Days Internship Training in WEB DEVELOPMENT
from Aug 12, 2022 at Zindot, Kochi. During the internship period we found him/her a sincere,
honest, hardworking, dedicated student with a professional attitude and very good profes-
sional knowledge.

Date : 26-08-2022

Director
Zindot

Date: 18/11/2021

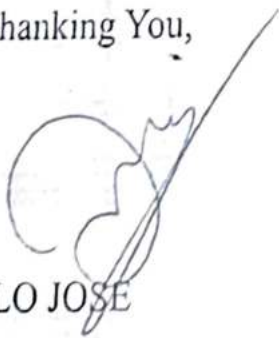
TO WHOM IT MAY CONCERN

This is to certify that Mr. SUJITHA (JCT College Of Engineering And Technology, Coimbatore Course: B.E Computer Science & Engineering) has successfully completed one month internship programme from 18-10-2021 to 18-11-2021 at Nestsoft Technologies, Cochin.

During the course of internship, he has trained in Python Machine Learning. He had a self motivated attitude to learn new things and was successfully able to launch the project on time.

We wish all the best for his future endeavors.

Thanking You,



JILO JOSE

Project Leader

Nestsoft Technologies, Cochin





CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss SNEKA RAJ SHUKLA

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021

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THIS IS TO CERTIFY THAT

KAVITHA KUMARI

Mr/Miss _____

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
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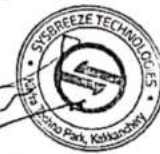
THIS IS TO CERTIFY THAT

DURAIRAJ

Mr/Miss

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
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THIS IS TO CERTIFY THAT

BUVANEESHWARAN

Mr/Miss

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
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THIS IS TO CERTIFY THAT

Mr/Miss SIVAM KUMAR

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

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TO WHOM IT MAY CONCERN

This is certify that MR CHAGALETI CHANDRA SEKHAR REDDY JCT College Of Engineering And Technology , Coimbatore Course : (B.E.Computer Science & Engineering) has successfully Completed one month internship programme from 18-10-2021 to18-11-2021 at Nestsoft Technologies

During the course of internship he has trained in python Machine Learning.He had a self motvatd attitude to learn new things and was successfully able to launch the project on time

We Wish all the best for his future endeavors

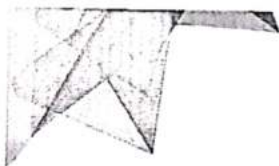
Thanking You,



JILO JOSE
Project Leader
Nestsoft Technologies,Cochin

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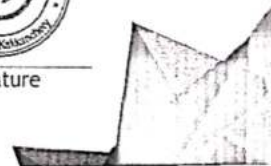
Mr/Miss KAMLESH KUMAR GUPTA

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
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16-10-2021
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THIS IS TO CERTIFY THAT

Mr/Miss KRISHNA KUMAR

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
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16-10-2021
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CERTIFICATE

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THIS IS TO CERTIFY THAT

MD AJBULLAH MANSURI

Mr/Miss

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
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THIS IS TO CERTIFY THAT

MD IFHAMULLAH

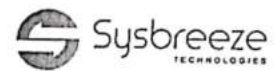
Mr/Miss _____

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16-10-2021
DATE



Signature



CERTIFICATE

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THIS IS TO CERTIFY THAT

MD JUNED ALAM

Mr/Miss _____

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
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16-10-2021

DATE



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THIS IS TO CERTIFY THAT

Mr/Miss DEVESH KUMAR

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
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16-10-2021
DATE

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THIS IS TO CERTIFY THAT

MD KHALID

Mr/Miss

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
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DATE



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THIS IS TO CERTIFY THAT

MD SAMAR ATIB

Mr/Miss

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
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16-10-2021

DATE



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OF EXCELLENCE

THIS IS TO CERTIFY THAT

MD SAQUIB ANSARI

Mr/Miss _____

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY

has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021

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16-10-2021

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Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

MINHAJ AKRAM

Mr/Miss _____

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021

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16-10-2021
DATE

A handwritten signature in black ink is written over a circular stamp. The stamp contains the text 'SYSBREEZE TECHNOLOGIES' around the perimeter and 'HOD, P.T. Assistant' in the center.
Signature

S-G

Date:18/11/2021

TO WHOM IT MAY CONCERN

This is certify that MR SHAYAM NARAYANAN J JCT College Of Engineering And Technology , Coimbatore Course : (B.E.Computer Science & Engineering) has successfully Completed one month internship programme from 18-10-2021 to18-11-2021 at Nestsoft Technologies

During the course of internship he has trained in python Machine Learning.He had a self motvatd attitude to learn new things and was successfully able to launch the project on time

We Wish all the best for his future endeavors

Thanking You,



JILO JOSE

Project Leader

Nestsoft Technologies,Cochin



Date:18/11/2021

TO WHOM IT MAY CONCERN

This is certify that MR.VISHNU A JCT College Of Engineering And Technology , Coimbatore Course : (B.E.Computer Science & Engineering) has successfully Completed one month internship programme from 18-10-2021 to18-11-2021 at Nestsoft Technologies

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JILO JOSE

Project Leader

Nestsoft Technologies, Cochin

S.S.K



Date:18/11/2021

TO WHOM IT MAY CONCERN

This is certify that MR.VISAKH V JCT College Of Engineering And Technology , Coimbatore Course : (B.E.Computer Science & Engineering) has successfully Completed one month internship programme from 18-10-2021 to18-11-2021 at Nestsoft Technologies

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JILO JOSE
Project Leader
Nestsoft Technologies, Cochin

S.S.K



Date:18/11/2021

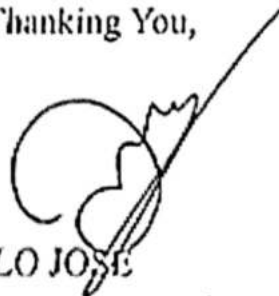
TO WHOM IT MAY CONCERN

This is certify that MR SARATHI S JCT College Of Engineering
And Technology , Coimbatore Course : (B.E.Computer Science &
Engineering) has successfully Completed one month internship
programmme from 18-10-2021 to18-11-2021 at Nestsoft Technologies

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Thanking You,



JILO JOSE
Project Leader
Nestsoft Technologies, Cochin

S.V.K



Date:18/11/2021

TO WHOM IT MAY CONCERN

This is certify that MR RAMESH KUMAR R JCT College Of Engineering And Technology , Coimbatore Course : (B.E.Computer Science & Engineering) has successfully Completed one month internship programme from 18-10-2021 to 18-11-2021 at Nestsoft Technologies

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Thanking You,



JILO JOSE
Project Leader
Nestsoft Technologies, Cochin



Date:18/11/2021

TO WHOM IT MAY CONCERN

This is certify that MR NIKHIL DASS M JCT College Of Engineering And Technology , Coimbatore Course : (B.E.Computer Science & Engineering) has successfully Completed one month internship programme from 18-10-2021 to18-11-2021 at Nestsoft Technologies

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Thanking You,



JILO JOSE
Project Leader
Nestsoft Technologies, Cochin

S-5



Date:18/11/2021

TO WHOM IT MAY CONCERN

This is certify that MR.NISHANTH CR JCT College Of Engineering And Technology , Coimbatore Course : (B.E.Computer Science & Engineering) has successfully Completed one month internship programme from 18-10-2021 to18-11-2021 at Nestsoft Technologies

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Thanking You,



JILO JOSE
Project Leader
Nestsoft Technologies,Cochin

S-S-H



Date:18/11/2021

TO WHOM IT MAY CONCERN

This is certify that MR NITHIN SEKAR D JCT College Of Engineering And Technology , Coimbatore Course : (B.E.Computer Science & Engineering) has successfully Completed one month internship programme from 18-10-2021 to18-11-2021 at Nestsoft Technologies

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JILO JOSE

Project Leader

Nestsoft Technologies, Cochin



Date:18/11/2021

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Date:18/11/2021

TO WHOM IT MAY CONCERN

This is certify that MR MUHAMMED SAHIL ICT College Of Engineering And Technology , Coimbatore Course : (B.E.Computer Science & Engineering) has successfully Completed one month internship programme from 18-10-2021 to18-11-2021 at Nestsoft Technologies

During the course of internship he has trained in python Machine Learning.He had a self motvatd attitude to learn new things and was successfully able to launch the project on time

We Wish all the best for his future endeavors

Thanking You,



JILO JOSE
Project Leader
Nestsoft Technologies, Cochin

S.S.K



Date:18/11/2021

TO WHOM IT MAY CONCERN

This is certify that MR MOHAMMED AASHIL KHAN A JCT College Of Engineering And Technology , Coimbatore Course : (B.E.Computer Science & Engineering) has successfully Completed one month internship programme from 18-10-2021 to18-11-2021 at Nestsoft Technologies

During the course of internship he has trained in python Machine Learning.He had a self motvatd attitude to learn new things and was successfully able to launch the project on time

We Wish all the best for his future endeavors

Thanking You,



JILO JOSE
Project Leader
Nestsoft Technologies, Cochin

S.S.K



Date:18/11/2021

TO WHOM IT MAY CONCERN

This is certify that MR MOHAMED ANSARDDIN M JCT College Of Engineering And Technology , Coimbatore Course : (B.E.Computer Science & Engineering) has successfully Completed one month internship programme from 18-10-2021 to18-11-2021 at Nestsoft Technologies

During the course of internship he has trained in python Machine Learning.He had a self motvatd attitude to learn new things and was successfully able to launch the project on time

We Wish all the best for his future endeavors

Thanking You,



JILO JOSE
Project Leader
Nestsoft Technologies, Cochin



Date:18/11/2021

TO WHOM IT MAY CONCERN

This is certify that MR MATHIAZHAGAN E JCT College Of Engineering And Technology , Coimbatore Course : (B.E.Computer Science & Engineering) has successfully Completed one month internship programme from 18-10-2021 to18-11-2021 at Nestsoft Technologies

During the course of internship he has trained in python Machine Learning.He had a self motvatd attitude to learn new things and was successfully able to launch the project on time

We Wish all the best for his future endeavors

Thanking You,



JILO JOSE
Project Leader
Nestsoft Technologies, Cochin

S.S.K



Date:18/11/2021

TO WHOM IT MAY CONCERN

This is certify that MR KISHORE E JCT College Of Engineering
And Technology , Coimbatore Course : (B.E.Computer Science &
Engineering) has successfully Completed one month internship
programme from 18-10-2021 to18-11-2021 at Nestsoft Technologies

During the course of internship he has trained in python
Machine Learning.He had a self motvatd attitude to learn new
things and was successfully able to launch the project on time

We Wish all the best for his future endeavors

Thanking You,



JILO JOSE
Project Leader
Nestsoft Technologies,Cochin

S.V.K





CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss ARSHI KHANAM

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

AZHARUDDIN ANSARI

Mr/Miss

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021

DATE



Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss DEEPAK KUMAR

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss SIVAGANESH

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021

DATE



Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss

SIVA S

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

NISHANTH CR

Mr/Miss _____

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature

CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss AJAY KUMAR SAHNI

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature



CERTIFICATE

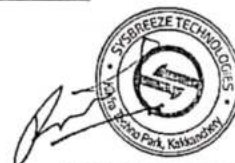
OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss MD SAHIL RAJA

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

MD KHALID

Mr/Miss _____

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021

DATE



Signature

S-5



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

RAVIRANJAN KUMAR

Mr/Miss _____

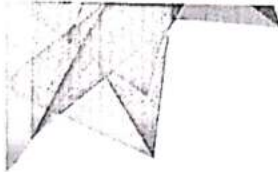
a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021

programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

ROHIT KUMAR

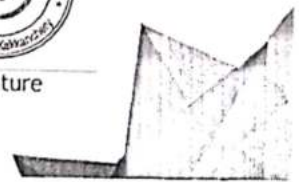
Mr/Miss _____

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE

S.S.K.


Signature





CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

ROHIT YADAV

Mr/Miss _____

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021

programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021

DATE



Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

SHABAB AHAMAD

Mr/Miss _____

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

SUMIT KUMAR

Mr/Miss _____

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

VIKRAM KUMAR

Mr/Miss _____

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021

programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

VISHAL KUMAR CHAUHAN

Mr/Miss _____

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021

DATE



Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

VIVEK KUMAR

Mr/Miss _____

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

MUSKAN KUMARI

Mr/Miss _____

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

NIRAJ PANDIT

Mr/Miss _____

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

NISHU KUMAR PANDEY

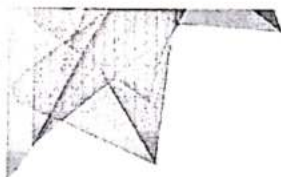
Mr/Miss _____

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

PARVEJ ANSARI

Mr/Miss _____

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

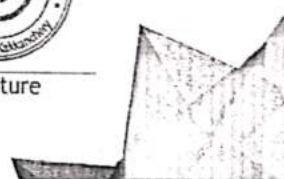
16-10-2021

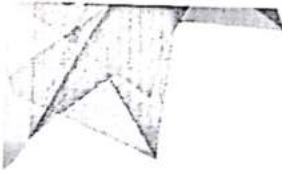
DATE

S.S.K



Signature





CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

PRATIK KUMAR JHA

Mr/Miss _____

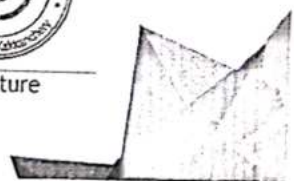
a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE

S-S



Signature





CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

PRIYA KUMARI

Mr/Miss _____

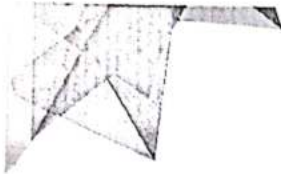
a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021

programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

RAHUL KUMAR SHARMA

Mr/Miss _____

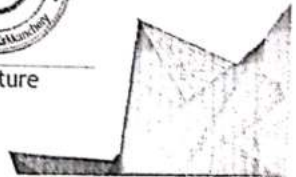
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has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE

S-G



Signature





CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

RANA PRATAP RAO

Mr/Miss _____

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021

programme on MOBILE APPLICATION -FLUTTER

at Sysbreeze technologies

16-10-2021

DATE



Signature

S-S



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

RANJIT KUMAR YADAV

Mr/Miss _____

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
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16-10-2021
DATE



Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

RAVI KUAMR

Mr/Miss _____

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY

has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021

programme on MOBILE APPLICATION -FLUTTER

at Sysbreeze technologies

16-10-2021
DATE



Signature



Mr/Miss _____ **AJAY KUMAR SAHNI**

16-10-2021
DATE



Signature

CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss ALISHA KHANAM

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature



CERTIFICATE

OF EXCELLENCE

THIS IS TO CERTIFY THAT

Mr/Miss ANKIT KUMAR PADIT

a student of BE.CSE From JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
has been successfully Completed 21 Days internship 27-09-2021 to 16-10-2021
programme on MOBILE APPLICATION -FLUTTER
at Sysbreeze technologies

16-10-2021
DATE



Signature

JCT

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
COIMBATORE-105
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



INTERNSHIP DETAILS

S.NO	TITLE OF THE COLLABORATIVE ACTIVITY	NAME OF THE AGENCY	NAME OF THE PARTICIPANT	YEAR	DURATION	NATURE OF THE ACTIVITY
1	INTERNSHIP	AZETECH SOLUTIONS	FENISHA PRINCES B	2022	15 DAYS	KNOWLEDGE ENRICHMENT PROGRAM TOWARDS EMBEDDED SYSTEM
2	INTERNSHIP	AZETECH SOLUTIONS	MALAVIKA KP	2022	15 DAYS	KNOWLEDGE ENRICHMENT PROGRAM TOWARDS EMBEDDED SYSTEM
3	INTERNSHIP	AZETECH SOLUTIONS	MRIDULA M	2022	15 DAYS	KNOWLEDGE ENRICHMENT PROGRAM TOWARDS EMBEDDED SYSTEM
4	INTERNSHIP	AZETECH SOLUTIONS	RAJASUBHISKSHA P	2022	15 DAYS	KNOWLEDGE ENRICHMENT PROGRAM TOWARDS EMBEDDED SYSTEM
5	INTERNSHIP	AZETECH SOLUTIONS	SARANRAJ S	2022	15 DAYS	KNOWLEDGE ENRICHMENT PROGRAM TOWARDS EMBEDDED SYSTEM
6	INTERNSHIP	AZETECH SOLUTIONS	VARUN N	2022	15 DAYS	KNOWLEDGE ENRICHMENT PROGRAM TOWARDS EMBEDDED SYSTEM
7	INTERNSHIP	AZETECH SOLUTIONS	VISHNU KM	2022	15 DAYS	KNOWLEDGE ENRICHMENT PROGRAM TOWARDS EMBEDDED SYSTEM
8	INTERNSHIP	AZETECH SOLUTIONS	ARUN.M	2022	15 DAYS	KNOWLEDGE ENRICHMENT PROGRAM TOWARDS EMBEDDED SYSTEM
9	INTERNSHIP	HERUKASTECH	PRAVEEN KUMAR.K	2022	15 DAYS	WORKING IN LIVE PROJECTS
10	INTERNSHIP	HERUKASTECH	BARATH P	2022	15 DAYS	WORKING IN LIVE PROJECTS
11	INTERNSHIP	HERUKASTECH	DHANUJNAIN A	2022	15 DAYS	WORKING IN LIVE PROJECTS
12	INTERNSHIP	HERUKASTECH	JAGAMSETTY SAIKIRAN	2022	15 DAYS	WORKING IN LIVE PROJECTS
13	INTERNSHIP	HERUKASTECH	NANDHAKUMAR Y	2022	15 DAYS	WORKING IN LIVE PROJECTS
14	INTERNSHIP	HERUKASTECH	T SATHISHKUMAR	2022	15 DAYS	WORKING IN LIVE PROJECTS
15	INTERNSHIP	HERUKASTECH	STEPHEN ROY S	2022	15 DAYS	WORKING IN LIVE PROJECTS
16	INTERNSHIP	HERUKASTECH	YARRA BHANU PRAKASH	2022	15 DAYS	WORKING IN LIVE PROJECTS
17	INTERNSHIP	HERUKASTECH	SIDDARTH G	2022	15 DAYS	WORKING IN LIVE PROJECTS

INTERNSHIP COORDINATOR



PRINCIPAL

JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

HOD ECE

Department of Electronics and Communication Engineering

Date: 8-07-2022

To,
Mr. Arul Nelson
Asst. Engineer,
Azetech solution,
Coimbatore-641006.

Dear Sir,

Sub: Internship opportunity -Reg.

Greetings from JCT College of Engineering and Technology!

Our Student(s) have undergone internship training in your esteemed Organization in the previous years. I acknowledge the help and the support extended to our student(s) during training in previous years.

In view of the above, I request your good self to allow our following student(s) for practical training in your esteemed organization. Kindly accord your permission and give at least 15 days(25/7/22 to 11/8/22) time for student(s) to join training after confirmation.

S.No	REGISTER No	NAME	DEPARTMENT
1	720919106001	FENISHA PRINCES B	Electronics And Communication Engineering
2	720919106003	MALAVIKA KP	
3	720919106004	MRIDULA M	
4	720919106005	RAJASUBHISKSHA P	
5	720919106006	SARANRAJ S	
6	720919106007	VARUN N	
7	720919106008	VISHNU KM	
8	720919106301	ARUN.M	

Thanking you,

Principal



S. K.
PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

Azotech Solutions

No.8, 2nd floor, Above Apollo Pharmacy,
Gopalsamykoil Street, Ganapathy,
Coimbatore – 641006.
Contact : +91 72000 33312



Date: 23-07-2022

To

JCT College

ECE Department Final year students

Pichanur, CBE

641105.

REG : Internship Trainee Offer

Dear Students,

We are pleased to offer you an internship with Azotech Solutions. This is an educational internship. Our goal is for you to learn more about **Embedded Systems**.

As we discussed, your internship is expected to **July 25 2022 to August 11 2022**. However, at the sole discretion of the Company, the duration of the internship may be extended or shortened with or without advance notice.

And in this internship you will Learn More about the Advanced Concepts of Embedded Systems & Microcontrollers under the Guidance of ARUL NELSON J software developer at Azotech Solutions.

The internship is offered for the following students:

- | | |
|----------------|-----------------------|
| 1. Varun .N | 5. Malavika.K.P |
| 2. Arun.M | 6. Mridula.M |
| 3. Vishnu.K.M | 7. Fenisha Princess.B |
| 4. Saran Raj.S | 8. Raja Subhiksha.P |

Date: 23.07.2022

Place: Coimbatore

Regards

Azotech Solutions

AZETECH SOLUTIONS
No.8, Gopalasamy Kovil Street,
Above Apollo Pharmacy,
GANAPATHY, COIMBATORE-641 006.



[Handwritten signature]
PRINCIPAL

JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

No.8, 2nd floor, Above Apolio Pharmacy,
Gopalsamykoil Street, Ganapathy,
Coimbatore - 641006.
Contact : +91 72000 33312.



CERTIFICATE OF INTERNSHIP

This is to certify that **FENISHA PRINCESS B** has done internship at **AZETECH SOLUTIONS** from July 25, 2022 to August 11, 2022 on "Knowledge Enrichment Program towards Embedded Systems" Under the Guidance of Mr. ARUL NELSON.J.

We have found her to be a self-starter who is motivated, duty bound and Hard-working. she Worked sincerely on her assignments and her performance was **Par Excellence**.

We wish her best of luck for the future.


JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.



Date: 11.08.2022
Place: Coimbatore


AZETECH SOLUTIONS
No.8, Gopalasamy Kovil Street,
Above Apollo Pharmacy,
GANAPATHY, COIMBATORE - 641 006.
Azetech Solutions

Azotech Solutions

No.8, 2nd floor, Above Apollo Pharmacy,
Gopalsamykoil Street, Ganapathy,
Coimbatore – 641006.
Contact : +91 72000 33312



CERTIFICATE OF INTERNSHIP

This is to certify that **MRIDULA M** has done internship at **AZETECH SOLUTIONS** from
July 25, 2022 to August 11, 2022 on "Knowledge Enrichment Program towards Embedded
Systems" Under the Guidance of Mr. ARUL NELSON.J.

We have found her to be a self-starter who is motivated, duty bound and Hard-working. She
Worked sincerely on her assignments and her performance was **Par Excellence**.

We wish her best of luck for the future.



[Handwritten signature]

PRINCIPAL

JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

Date: 11.08.2022
Place: Coimbatore

[Handwritten signature]

Regards

AZETECH SOLUTIONS
Azetech Solutions
No.8, Gopalesamy Kovil Street,
Above Apollo Pharmacy,
GANAPATHY, COIMBATORE-641 006.

No.8, 2nd floor, Above Apollo Pharmacy,
Gopalsamykoil Street, Ganapathy,
Coimbatore – 641006.
Contact : +91 72000 33312



CERTIFICATE OF INTERNSHIP

This is to certify that **MALAVIKA K P** has done internship at **AZETECH SOLUTIONS** from
July 25, 2022 to August 11, 2022 on "Knowledge Enrichment Program towards Embedded
Systems" Under the Guidance of Mr. ARUL NELSON J.

We have found her to be a self-starter who is motivated, duty bound and Hard-working. she
Worked sincerely on her assignments and her performance was **Par Excellence**.

We wish her best of luck for the future.

PRINCIPAL
JCT College of Engineering and Technology,
PICHANUR, COIMBATORE - 641 105.



Date: 11.08.2022
Place: Coimbatore


Regards
AZETECH SOLUTIONS
Azetech Solutions
No.8, Gopalasamy Kovil Street,
Above Apollo Pharmacy,
GANAPATHY, COIMBATORE - 641 006.

No.8, 2nd floor, Above Apollo Pharmacy,
Gopalsamykoil Street, Ganapathy,
Coimbatore – 641006.
Contact +91 72000 33312



CERTIFICATE OF INTERNSHIP

This is to certify that **RAJASUBHIKSHA P** has done internship at **AZETECH SOLUTIONS** from July 25, 2022 to August 11, 2022 on "Knowledge Enrichment Program towards Embedded Systems" Under the Guidance of Mr. ARUL NELSON.J.

We have found her to be a self-starter who is motivated, duty bound and Hard-working. she Worked sincerely on her assignments and her performance was **Par Excellence**.

We wish her best of luck for the future.


PRINCIPAL

JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.



Date: 11.08.2022
Place: Coimbatore



Regards
AZETECH SOLUTIONS
No.8, Gopalsamy Kovil Street,
Above Apollo Pharmacy,
GANAPATHY, COIMBATORE - 641 006.

No.8, 2nd floor, Above Apollo Pharmacy,
Gopalsamykoi Street, Ganapathy,
Coimbatore - 641006.
Contact : +91 72000 33312



CERTIFICATE OF INTERNSHIP

This is to certify that **SARANRAJ S** has done internship at **AZETECH SOLUTIONS** from
July 25, 2022 to August 11, 2022 on "Knowledge Enrichment Program towards Embedded
Systems" Under the Guidance of Mr. ARUL NELSON.J.

We have found him to be a self-starter who is motivated, duty bound and Hard-working. He
Worked sincerely on his assignments and his performance was **Par Excellence**.

We wish him best of luck for the future.


PRINCIPAL
JCT College of Engineering and Technology
PICHANUR - COIMBATORE - 641 105.



Date: 11.08.2022
Place: Coimbatore


Regards
AZETECH SOLUTIONS
No.8, Gopalasamy Kovil Street,
Above Apollo Pharmacy,
GANAPATHY, COIMBATORE - 641 006.

No.8, 2nd floor, Above Apollo Pharmacy,
Gopalsamykoil Street, Ganapathy,
Coimbatore – 641006.
Contact : +91 72000 33312



CERTIFICATE OF INTERNSHIP

This is to certify that **VARUN N** has done internship at **AZETECH SOLUTIONS** from
July 25, 2022 to August 11, 2022 on "**Knowledge Enrichment Program towards Embedded
Systems**" Under the Guidance of Mr. ARUL NELSON.J.

We have found him to be a self-starter who is motivated, duty bound and Hard-working. He
Worked sincerely on his assignments and his performance was **Par Excellence**.

We wish him best of luck for the future.


JCT College of Engineering and Technology
PICHANUR, Coimbatore - 641 105.



Date: 11.08.2022
Place: Coimbatore


Regards
AZETECH SOLUTIONS
No.8, Gopalasamy Kovil Street,
Above Apollo Pharmacy,
GANAPATHY, COIMBATORE-641 006.

No 8, 2nd floor, Above Apollo Pharmacy,
Gopalsamykoil Street, Ganapathy,
Coimbatore – 641006.
Contact : +91 72000 33312



CERTIFICATE OF INTERNSHIP

This is to certify that **VISHNU K M** has done internship at **AZETECH SOLUTIONS** from
July 25, 2022 to August 11, 2022 on "Knowledge Enrichment Program towards Embedded
Systems" Under the Guidance of Mr. ARUL NELSON J

We have found him to be a self-starter who is motivated, duty bound and Hard-working. He
Worked sincerely on his assignments and his performance was **Par Excellence**.

We wish him best of luck for the future.


JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641005.



Date: 11.08.2022
Place: Coimbatore



Regards

Azetech Solutions
AZETECH SOLUTIONS
No.8, Gopalasamy Kovil Street,
Above Apollo Pharmacy,
GANAPATHY, COIMBATORE - 641 006.

No.8, 2nd floor, Above Apollo Pharmacy,
Gopalsamykoil Street, Ganapathy,
Coimbatore – 641006.
Contact : +91 72000 33312



CERTIFICATE OF INTERNSHIP

This is to certify that **ARUN M** has done internship at **AZETECH SOLUTIONS** from
July 25, 2022 to August 11, 2022 on "Knowledge Enrichment Program towards Embedded
Systems" Under the Guidance of Mr. ARUL NELSON.J.

We have found him to be a self-starter who is motivated, duty bound and Hard-working. He
Worked sincerely on his assignments and his performance was **Par Excellence**.

We wish him best of luck for the future.


JCT College of Engineering and Techno
PICHANUR, COIMBATORE - 641 105.



Date: 11.08.2022
Place: Coimbatore


Regards
AZETECH SOLUTIONS
No.8, Gopalasamy Kovil Street,
Above Apollo Pharmacy,
GANAPATHY, COIMBATORE-641 006.

Department of Electronics and Communication Engineering

Date: 05-07-2022

To,
Mr. Prithiviraj,
Managing Director,
Herukas Tech Private Limited,
Chennai- 96.

Dear Sir,

Sub: Internship opportunity -Reg.

Greetings from JCT College of Engineering and Technology!

I would like to seek your kind patronage in providing internship opportunity to our Mechanical Engineering students. It will be a great exposure for them to gain industrial and hands on experience.

We request you to kindly share the availability schedule at an early date .



Thanking you,

Principal


PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.



HERUKAS TECH PVT LIMITED

2nd Floor, 4/ 293- Cowrks, Rajiv Gandhi Salai, Perungudi,
Chennai- 96

Emailinfo@herukastech.com



18-07-2022

INTERNSHIP ACCEPTANCE LETTER

Dear students!

We are pleased to confirm your selection for the internship program at Herukas Tech Private Ltd. You have been selected for internship with the project development Department. The tenure of internship with Herukas Tech Private Ltd is 15 days and will start from July 25th, 2022 and will end on August 10th, 2022.

At the end of the internship, you will be required to submit a copy of your project report, the topic and timeline of which will be shared by your supervisor on the day of your joining. On successful completion the six months of internship program and after submitting the project report, you will be awarded with a completion certificate that can be used for your recruitments in future.

During the internship, you may come across confidential information about Herukas Tech Private Ltd. By accepting this offer, you acknowledge and agree that you will not be using this information for personal use and will not be disclosing it to anyone.



Mr. Prithiviraj S

Managing Director,

Herukas Tech Private Limited,



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JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.



HERUKAS TECH PVT LTD
WE AFFORD TECHNOLOGY

CERTIFICATION OF INTERNSHIP

THIS CERTIFICATE IS PROUDLY PRESENTED TO

K. PRAVEEN KUMAR B.E. ECE (720919106302), FROM

JCT COLLEGE OF ENGINEERING, FOR ATTENDING WEB DEVELOPMENT

INTERNSHIP AND WORKING IN LIVE PROJECTS FOR

HERUKAS TECH PVT LTD FROM JUL 15 2022 TO 10 AUG 2022

FOR HERUKAS TECH PVT LTD

10-08-2022

DATE

PRINCIPAL
JCT College of Engineering and Technology
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DIRECTOR

SIGNATURE



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THIS CERTIFICATE IS PROUDLY PRESENTED TO

P. BARATH B.E. ECE (720920106001) FROM

JCT COLLEGE OF ENGINEERING, FOR ATTENDING WEB DEVELOPMENT

INTERNSHIP AND WORKING IN LIVE PROJECTS FOR

HERUKAS TECH PVT LTD FROM JUL 25 2022 TO 10 AUG 2022

FOR HERUKAS TECH PVT LTD

10-08-2022

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THIS CERTIFICATE IS PROUDLY PRESENTED TO

N.A. DHANUJNAI B.E ECE (720920106002) FROM

JCT COLLEGE OF ENGINEERING, FOR ATTENDING WEB DEVELOPMENT

INTERNSHIP AND WORKING IN LIVE PROJECTS FOR

HERUKAS TECH PVT LTD FROM JUL 25 2022 TO 10 AUG 2022

FOR HERUKAS TECH PVT LTD

10-08-2022

DATE



DIRECTOR JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

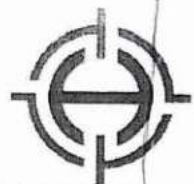
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JAGAMSETTY SAIKIRAN B.E. ECE (720920106003) FROM

JCT COLLEGE OF ENGINEERING, FOR ATTENDING WEB DEVELOPMENT

INTERNSHIP AND WORKING IN LIVE PROJECTS FOR

HERUKAS TECH PVT LTD FROM JUL 25 2022 TO 10 AUG 2022

FOR HERUKAS TECH PVT LTD

10-08-2022

DATE


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Y. NANDHAKUMAR B.E. ECE (720920106004) FROM

JCT COLLEGE OF ENGINEERING, FOR ATTENDING WEB DEVELOPMENT

INTERNSHIP AND WORKING IN LIVE PROJECTS FOR

HERUKAS TECH PVT LTD FROM JUL 25 2022 TO 10 AUG 2022

FOR HERUKAS TECH PVT LTD

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T.SATHISHKUMAR B.E. ECE (720920106006) FROM

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INTERNSHIP AND WORKING IN LIVE PROJECTS FOR

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FOR HERUKAS TECH PVT LTD

10-08-2022

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S. STEPHEN ROY B.E. ECE (720920106007) FROM

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INTERNSHIP AND WORKING IN LIVE PROJECTS FOR

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10-08-2022

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Principal
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PICHANUR, COMBATORE - 641 105.

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YARRA BHANU PRAKASH B.E. ECE (720920706009) FROM

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INTERNSHIP AND WORKING IN LIVE PROJECTS FOR

HERUKAS TECH PVT LTD FROM JUL 25 2022 TO 10 AUG 2022

FOR HERUKAS TECH PVT LTD

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INTERNSHIP AND WORKING IN LIVE PROJECTS FOR

HERUKAS TECH PVT LTD FROM JUL 25 2022 TO 10 AUG 2022

FOR HERUKAS TECH PVT LTD

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SIGNATURE

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JCT

College of Engineering & Technology

JCT COLLEGE OF ENGINEERING & TECHNOLOGY
COIMBATORE-641105
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING



ACADEMIC YEAR:2021-2022			PROJECT BATCH		YEAR/ SEM: IV / VIII	
S.No	Batch No	Register Number	Name of the Student	Project Guide	PROJECT TITLE	
1	1	720918106001	ABISHA F	Ms.SINDHU	ENHANCEMENT OF MULTIMEDIA TRANSMISSION AND UNDERWATER COMMUNICATION USING LIFI THROUGH GPS DETECTOR	
2		720918106014	KARTHIKESWARAN R P			
3		720918106016	MALARKODI.R			
4		720918106028	SUSMA J V			
5	2	720918106005	ARUNKUMAR S	MR.RENSWICK.S	ENCRYPTED DATA TRANSMISSION IN CAN (CONTROLLER AREA NETWORK) PROTOCOL	
6		720918106013	JERBY J J			
7		720918106015	KOYLATH ATHUL PREMARAJAN			
8		720918106027	SURIYA PRIYA.M			
9	3	720918106007	DHILSHIYA M	Ms.VINODHINI.M	SMART AGRICULTURE MONITORING AND LEAF DISEASE IDENTIFICATION	
10		720918106022	RAJALAKSHMI.G			
11		720918106024	SIVA G			
12		720918106030	YUVARAJ M			
13	4	720918106003	ANOOP.R	MR.BABU.K	MULTI LANGUAGE HOME AUTOMATION USING GOOGLE ASSISTANT	
14		720918106009	GOPIKA ANAND K			
15		720918106023	REJIL KRISHNAN.N.R			
16	5	720918106020	MUHAMMED ANSHID.K	MRS.MOHANAPRIYA.S	ARTIFICIAL INTELLIGENT BASED AUTOMATIC SURVEILLANCE ROBOT	
17		720918106004	ARIF.S			
18		720918106021	PRIYANKA.K			
19		720918106026	SUBALAKSHMI.R			
20	6	720918106025	SREE KAVINAYA S	MRS.POORNIMA.R	AUTOMATIC MEDICAL DISPATCHER WITH DYNAMIC TELE-MONITORING SYSTEM	
21		720918106010	GOPINATH L			
22		720918106012	JAYABHARATHI.A			
23		720918106017	MATHEESH M			

[Signature]
HOD



[Signature]
PRINCIPAL

PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.

ANNA UNIVERSITY: CHENNAI 600 025

BONAFIDE CERTIFICATE

Certified that this project report "ENHANCEMENT OF MULTIMEDIA TRANSMISSION AND UNDERWATER COMMUNICATION USING LIFI THROUGH GPS DETECTOR " is the bonafide work of "Abisha F,Karthikeswaran RP, Malarkodi R , Susma JV" who carried out the project work under my supervision.


SIGNATURE

Prof. D. Vedha Vinodha.,ME

HEAD OF THE DEPARTMENT

Department of Electronics &
Communication Engineering,
JCT College of Engineering &
Technology, Pichanur,
Coimbatore - 641105.


SIGNATURE

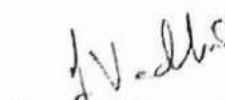
Prof. A.Sindhu.,ME

SUPERVISOR

Department of Electronics &
Communication Engineering,
JCT College of Engineering &
Technology, Pichanur,
Coimbatore - 641105.

Submitted for the project viva voce held on .25.06.2022.....




Internal Examiner


PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.


External Examiner

Abstract

Nowadays there are extensive ongoing research activities relating to underwater communication. This project focus on the safety on sea in which the headlights which consists of LED acting as a transmitter communicate with photo sensor acting as a receiver . Underwater communication is a technique of sending and receiving information below water. It plays an important role in marine activities such as environmental monitoring, military purposes, etc. This project concentrates on using Li-Fi for underwater communication. The information to be sent is encrypted and send to the ARDUINO UNO which has the Li-Fi module connected to it The information is sent to the receiver microcontroller via light. Decrypted using MPLAB, HiTech Compiler and Embedded C in Visual Studio.

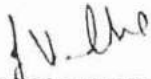



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JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

ANNA UNIVERSITY: CHENNAI 600 0265

BONAFIDE CERTIFICATE

Certified that this project report "ENCRYPTED DATA TRANSMISSION IN CAN (CONTROLLER AREA NETWORK) PROTOCOL" is the bonafide work of "Arunkumar S, Jerby JJ, Koylath Athul Premarajan, Suriya Priya M" who carried out the project work under my supervision.



SIGNATURE

Prof. D Vedha Vinodha

HEAD OF THE DEPARTMENT

Department of Electronics &
Communication Engineering,
JCT College of Engineering &
Technology, Pichanur,
Coimbatore - 641105.



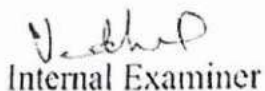
SIGNATURE

Prof. S. Renswick

SUPERVISOR

Department of Electronics &
Communication Engineering,
JCT College of Engineering &
Technology, Pichanur,
Coimbatore - 641105.

Submitted for the project viva voce held on 25/6/22



Internal Examiner



External Examiner

PRINCIPAL

JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.



ABSTRACT

Agriculture is the backbone of our country. Our country economy highly depends upon the agriculture productivity. Productivity of crops in agriculture is in great demand. For decades, agriculture had been connected with the generation of improvement in the farming technology. This paper proposes the concept of internet of things and plays a role of IoT in agricultural sector. We develop a user friendly, IoT architecture to increase productivity. We also develop a robot monitoring system it contains a camera and fertilizer spray. From the camera, to identify the leaf disease on the field with a help of OpenCV technology. We use a different type of sensors like temperature sensor, soil moisture sensor, humidity sensor and ultrasonic sensor. These sensors are connected to raspberry pi controls the field activity. The sensors sense each activity happening in the field. The farmer will come to know about the field scenario through messages (GSM) and can smartly do watering to the field in very efficient manner without overdoing it and quality of the crops is saved. Detection of plant disease through some automatic technique is beneficial as it reduces a large work of monitoring in big farms of crops, and at very early stage itself it detects the diseases. This paper presents an algorithm for image processing technique which is used for automatic detection and classification of plant leaf diseases. It also covers survey on different diseases classification techniques that can be used for plant leaf disease detection.

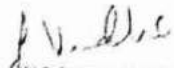


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PICHANUR, COIMBATORE - 641 105.

ANNA UNIVERSITY: CHENNAI 600 025

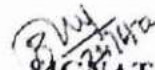
BONAFIDE CERTIFICATE

Certified that this project report "MULTI LANGUAGE HOME AUTOMATION USING GOOGLE ASSISTANT" is bonafide work of "ANOOP.R, GOPIKA ANAND.K, REJIL KRISHNAN.N.R." who carried out the project under my supervision.


SIGNATURE

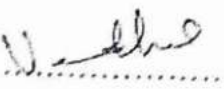
Prof.D.VEDHA VINODHA
HEAD OF THE DEPARTMENT

Department of Electronics
And Communication Engineering
JCT College of Engineering And
Technology, Coimbatore 641105


SIGNATURE

Prof.K.BABU
SUPERVISOR,
ASSISTANT PROFESSOR
Department of Electronics
And Communication Engineering
JCT College of Engineering And
Technology, Coimbatore 641105

Submitted for the project Viva-Voice examination held on 25/06/2022...


Internal Examiner


External Examiner




PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

ABSTRACT

The main objective behind this paper is to develop an Artificial intelligent based Automatic Surveillance Robot to perform the act of surveillance in country border areas. This surveillance robot not only records the video and audio within its range, but also detects the presence of human, metal bombs and hazardous gases. In this project the camera attached to the robot, stream live videos and does the operation of human recognition by comparing with the prebuilt data bases. Robots can be manually controlled or can be automatic based on the requirement. This model is capable of locomotion on various surfaces and terrains. The proposed model has two individual units which are the base station (coded software) where the alert is send and a robotic unit which surveillance in the border area. The robot will roam around a predefined path and continuously monitor the surrounding which is achieved by a raspberry pi technology along with motors for movement driven by a motor driver circuit. We do this project using Machine learning and python openCV code running in raspberry pie.

Key points: Human detection and recognition, Automatic surveillance, Detects presence of metal bombs and hazardous gases, python OpenCV.




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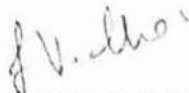
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BONAFIDE CERTIFICATE

Certified that this project report "AUTOMATIC MEDICAL DISPATCHER WITH DYNAMIC TELEMONITORING SYSTEM" is the bonafide work of "Gopinath L, Jayabharathi A, Matheesh M, Sree Kavinaya S" who carried out the project work under my supervision.


SIGNATURE

Prof. D. VEDHA VINODHA
HEAD OF THE DEPARTMENT

Department of Electronics
and Communication
Engineering

JCT College of Engineering and
Technology, Coimbatore 641105


SIGNATURE

Prof. POORNIMA R
SUPERVISOR

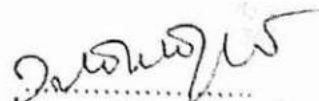
Assistant Professor

Department of Electronics and
Communication Engineering

JCT College of Engineering and
Technology, Coimbatore 641105

Submitted for the project viva voce held on 25/06/2022


Internal Examiner


External Examiner




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PICHANUR, COIMBATORE - 641 105.

ABSTRACT

With the rapid aging and economic growth, people are now more interested in their long term health, fitness and wellness. Automatic medical dispatcher with dynamic tele-monitoring system allows an individual to check the medical parameters such as blood pressure, heartbeat, body temperature, height and weight regularly without the need of visiting hospitals. The measurements are done using appropriate sensors that are all incorporated in an ATM centre. An individual can check the medical parameters after swiping the smartcard of the person in the smart card reader. After the check, the money for the particular test is transferred from the smartcard. Then the health conditions are displayed on LCD Display and the obtained bio signal from each sensory unit is transmitted to the person's mobile phone via GSM. We deploy the Anytime Medical Dispatcher with dynamic tele-monitoring system using IoT in all the rural areas where people cannot get good/best doctors on track. Sensors have been gradually embedded into diverse systems of our lives through computer technology, automation, and automated signal processing.

Keywords: IoT, Automatic Medical dispatcher, tele-monitoring, medical parameters, rural areas, sensors, automation.



A handwritten signature in green ink, consisting of stylized, flowing lines.

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JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

Sl. No.	Title of the collaborative activity	Name of the collaborating agency with contact details	Name of the participant	Year of collaboration	Duration
1	Internship	VEI Technologies	ABDUL KARIM ANSARI	2020-21	20.01.2021 to 06.02.2021
2	Internship	VEI Technologies	CHOTTU KUMAR	2020-21	20.01.2021 to 06.02.2021
3	Internship	VEI Technologies	JARWAN KUMAR	2020-21	20.01.2021 to 06.02.2021
4	Internship	VEI Technologies	LAKHINDAR KUMAR T	2020-21	20.01.2021 to 06.02.2021
5	Internship	VEI Technologies	SARVESH KUMAR	2020-21	20.01.2021 to 06.02.2021
6	Internship	AZETECH SOLUTIONS	MD SADDAM HUSSAIN	2020-21	19.01.2021 to .5.02.2021
7	Internship	AZETECH SOLUTIONS	PRINCE KUMAR GUPTA	2020-21	19.01.2021 to .5.02.2021
8	Internship	AZETECH SOLUTIONS	RITIK KUMAR	2020-21	19.01.2021 to .5.02.2021
9	Internship	AZETECH SOLUTIONS	SANOJ KUMAR	2020-21	19.01.2021 to .5.02.2021
10	Internship	AZETECH SOLUTIONS	SHAHABUDDIN MANSURI	2020-21	19.01.2021 to .5.02.2021
11	Internship	The metal industries limited	JAYAPRAKASH A	2020-21	22.10.2021 to 04.11.2021
12	Internship	The metal industries limited	SARAVANAN B	2020-21	22.10.2021 to 04.11.2021
13	Internship	The metal industries limited	ASWIN R	2020-21	22.10.2021 to 04.11.2021
14	Internship	The metal industries limited	FUHAD K	2020-21	22.10.2021 to 04.11.2021
15	Internship	The metal industries limited	SRIKANTH M	2020-21	22.10.2021 to 04.11.2021
16	Internship	LARSEN & TOUBRO LIMITED	MRIDHUL RAJU	2020-21	02.08.2021 to 31.08.2021
17	Internship	LARSEN & TOUBRO LIMITED	AMARNATH M	2020-21	02.08.2021 to 31.08.2021
18	Internship	LARSEN & TOUBRO LIMITED	ASHIQ S	2020-21	02.08.2021 to 31.08.2021
19	Internship	LARSEN & TOUBRO LIMITED	HARIKRISHNAN T	2020-21	02.08.2021 to 31.08.2021
20	Internship	LARSEN & TOUBRO LIMITED	MANASA G	2020-21	02.08.2021 to 31.08.2021
21	Internship	LARSEN & TOUBRO LIMITED	VENKATA SANTHOSH	2020-21	02.08.2021 to 31.08.2021
22	Internship	IPCS GLOBAL SERVICES LLP	SIJIL JOHNSON	2020-21	27.07.2021 to 06.08.2021
23	Internship	IPCS GLOBAL SERVICES LLP	VISHNU B	2020-21	27.07.2021 to 06.08.2021
24	Internship	IPCS GLOBAL SERVICES LLP	AYYAPPADAS K.M	2020-21	27.07.2021 to 06.08.2021
25	Internship	IPCS GLOBAL SERVICES LLP	DIKUL	2020-21	27.07.2021 to 06.08.2021
26	Internship	IPCS GLOBAL SERVICES LLP	RESHMA G	2020-21	27.07.2021 to 06.08.2021


PRINCIPAL
 JCT College of Engineering and Technology
 PICHANUR, COIMBATORE - 641 105.



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Students Name list

Course & Branch: B.E & EEE

S.NO.	REG. NO.	NAME	Intern company
1	720920105001	ABDUL KARIM ANSARI	VEI Technologies
2	720920105003	CHOTTU KUMAR	VEI Technologies
3	720920105004	JARWAN KUMAR	VEI Technologies
4	720920105005	JAYAPRAKASH A	The Metal Industries Limited
5	720920105007	LAKHINDAR KUMAR T	VEI Technologies
6	720920105010	MD SADDAM HUSSAIN	Azetech Solutions
7	720920105011	MRIDHUL RAJU	Larsen & Toubro
8	720920105012	PRINCE KUMAR GUPTA	Azetech Solutions
9	720920105014	RITIK KUMAR	Azetech Solutions
10	720920105015	SANOJ KUMAR	Azetech Solutions
11	720920105016	SARAVANAN B	The Metal Industries Limited
12	720920105017	SARVESH KUMAR	VEI Technologies
13	720920105018	SHAHABUDDIN MANSURI	Azetech Solutions
14	720920105019	SIJIL JOHNSON	IPCS Global
15	720920105021	VISHNU B	IPCS Global
16	720920105301	AMARNATH M	Larsen & Toubro
17	720920105302	ASHIQ S	Larsen & Toubro
18	720920105303	ASWIN R	The Metal Industries Limited
19	720920105304	AYYAPPADAS K.M	IPCS Global
20	720920105305	DIKUL	IPCS Global
21	720920105306	FUHAD K	The Metal Industries Limited
22	720920105308	HARIKRISHNAN T	Larsen & Toubro
23	720920105310	RESHMA G	IPCS Global
24	720920105311	SRIKANTH M	The Metal Industries Limited
25	720920105312	MANASA G	Larsen & Toubro
26	720920105313	VENKATA SANTHOSH A	Larsen & Toubro


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 PICHANUR, COIMBATORE - 641 105.




Dr. K. GEETHA, M.E., Ph.D.,
 Head of the Department
 Department of Electrical & Electronics Engg
 JCT College of Engineering and Technology
 Coimbatore - 641 105.



Date: 12-12-2020

To

Dr. B. Ezhilavan,
Managing Director,
VEI Technology,
Chennai - 600056.

Dear Sir,

Sub: Seeking Internship opportunity - Reg.

We group of students from II year, Electrical and Electronics Engineering, JCT College of Engineering and Technology are planning on registering for your internship program. I was hoping that we could join the company as interns, as you have mentioned on your site that you consider volunteer work for certain period.

So we request you to tell the duration of the internship period and confirmation that will be receiving a certificate.

Hopefully, you would consider us.

Thanking You


PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.



Yours,

Principal

INTERNSHIP ACCEPTANCE LETTER

This is to inform that the students of II Year, Electrical and Electronics Engineering, JCT College of Engineering and Technology, Coimbatore, will be undergoing internship program at our VEI TECHNOLOGIES premises.

They will be undertaking their internship in our software development department. The internship will be of 15 days and shall commence from 20-01-2021 in our location.

For any further queries, please contact the undersigned authority.




PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.





Dr. B. Ezhilavan
Managing Director
No.244, First Floor
Trunk Road, PSB Complex
Ponnamallee, Chennai- 56,
Tamil Nadu, India
Phone: (+91) 90037 85766

CERTIFICATE OF INTERNSHIP

This is to certify that **ABDUL KARIM ANSARI** has done internship at **VEI Technologies** from **JANUARY 20, 2021** to **FEBRUARY 06, 2021** on "Knowledge Enrichment Program towards Embedded Systems".

We have found him to be a self-starter who is motivated, duty bound and Hard-working. He Worked sincerely on his assignments and his performance was Par Excellence.

We wish him best of luck for the future.



A handwritten signature in black ink, appearing to read "B. Ezhilavan".

Dr.B.Ezhilavan
Managing Director
No.244, First Floor
Trunk Road, PSB Complex
Ponnamallee, Chennai – 56,
Tamil Nadu, India

A handwritten signature in black ink, appearing to read "Principal".

PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

We Design for future Technologies

CERTIFICATE OF INTERNSHIP

This is to certify that **CHOTTU KUMAR** has done internship at **VEI Technologies** from **JANUARY 20, 2021** to **FEBRUARY 06, 2021** on "Knowledge Enrichment Program towards **Embedded Systems**".

We have found him to be a self-starter who is motivated, duty bound and Hard-working. He Worked sincerely on his assignments and his performance was Par Excellence.

We wish him best of luck for the future.



B. E. 7.

Dr.B.Ezhilavan
Managing Director
No.244, First Floor
Trunk Road, PSB Complex
Ponnamallee, Chennai – 56,
Tamil Nadu, India



PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

CERTIFICATE OF INTERNSHIP

This is to certify that **JARWAN KUMAR** has done internship at **VEI Technologies** from **JANUARY 20, 2021 to FEBRUARY 06, 2021** on "Knowledge Enrichment Program towards Embedded Systems".

We have found him to be a self-starter who is motivated, duty bound and Hard-working. He Worked sincerely on his assignments and his performance was Par Excellence.

We wish him best of luck for the future.



A handwritten signature in black ink, appearing to read "B. Ezhilavan".

Dr.B.Ezhilavan
Managing Director
No.244, First Floor
Trunk Road, PSB Complex
Ponnamallee, Chennai – 56,
Tamil Nadu, India

A handwritten signature in blue ink, appearing to be a stylized name.

PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

CERTIFICATE OF INTERNSHIP

This is to certify that **SARVESH KUMAR** has done internship at **VEI Technologies** from **JANUARY 20, 2021 to FEBRUARY 06, 2021** on "Knowledge Enrichment Program towards **Embedded Systems**".

We have found him to be a self-starter who is motivated, duty bound and Hard-working. He Worked sincerely on his assignments and his performance was Par Excellence.

We wish him best of luck for the future.



A handwritten signature in black ink, appearing to read "B. Ezhilavan".

Dr.B.Ezhilavan
Managing Director
No.244, First Floor
Trunk Road, PSB Complex
Ponnamallee, Chennai – 56,
Tamil Nadu, India

A handwritten signature in black ink, appearing to be a stylized name.

PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.



Date: 12-12-2020

To

Mr. J. Arun Nelson,
Assistant Manager,
Azetech Solutions,
Chennai - 600056.

Dear Sir,

Sub: Internship opportunity in Embedded Training - Reg.

We group of students from II year, Electrical and Electronics Engineering, JCT College of Engineering and Technology are planning on registering for your internship program. I was hoping that we could join the company as interns, as you have mentioned on your site that you consider volunteer work for certain period.

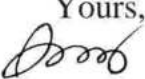
So we request you to tell the duration of the internship period and confirmation that will be receiving a certificate.

Hopefully, you would consider us.

Thanking You




PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.

Yours,

Principal

Azotech Solutions

No.8, 2nd floor, Above Apollo Pharmacy,
Gopalsamykoil Street, Ganapathy,
Coimbatore – 641006.
Contact : +91 72000 33312



28-12-2020

Mr. J. Arun Nelson
No. 8, IInd Floor,
Above Apollo Pharmacy,
Gopalsamykoil Street,
Ganapathy,
Coimbatore – 641 006.

Sub: Letter of Internship Acceptance

Dear Students

We are pleased to offer you an internship program to the students of II Year, Electrical and Electronics Engineering with Azotech Solutions for five days from 19-01-2021 to 05-02-2021.

You should note that any information and data collected from you during the course of your internship should be kept confidential at all times.

We appreciate your interest in Azotech Solutions.

Yours Sincerely,


Regards
Azotech Solutions
AZOTECH SOLUTIONS
No.8, Gopalasamy Kevil Street,
Above Apollo Pharmacy,
GANAPATHY, COIMBATORE-641 006.

Date: 28-12-2020
Place: Coimbatore




PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.

Azotech Solutions

No.8, 2nd floor, Above Apollo Pharmacy,
Gopalsamykoil Street, Ganapathy,
Coimbatore – 641006.
Contact : +91 72000 33312



CERTIFICATE OF INTERNSHIP

This is to certify that MD SADDAM HUSSAIN has done internship at **AZETECH SOLUTIONS** from
January 19, 2021 to February 05, 2021 on "Knowledge Enrichment Program towards
Embedded Systems" Under the Guidance of Mr. ARUL NELSON.J.

We have found him to be a self-starter who is motivated, duty bound and Hard-working.
He Worked sincerely on his assignments and his performance was **Par Excellence**.

We wish him best of luck for the future.


PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.



Date: 05.02.2021
Place: Coimbatore


Regards
Azotech Solutions
AZETECH SOLUTIONS
No.8, Gopalsamy Kovil Street,
Above Apollo Pharmacy,
GANAPATHY, COIMBATORE-641 006.

Azotech Solutions

No.8, 2nd floor, Above Apollo Pharmacy,
Gopalsamykoil Street, Ganapathy,
Coimbatore – 641006.
Contact : +91 72000 33312



CERTIFICATE OF INTERNSHIP

This is to certify that **PRINCE KUMAR GUPTA** has done internship at **AZETECH SOLUTIONS** from
January 19, 2021 to February 05, 2021 on "Knowledge Enrichment Program towards
Embedded Systems" Under the Guidance of Mr. ARUL NELSON.J.

We have found him to be a self-starter who is motivated, duty bound and Hard-working.

He Worked sincerely on his assignments and his performance was **Par Excellence**.

We wish him best of luck for the future.


PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

Date: 05.02.2021
Place: Coimbatore




Regards
Azetech Solutions
AZETECH SOLUTIONS
No.8, Gopalsamy Kevil Street,
Above Apollo Pharmacy,
GANAPATHY, COIMBATORE - 641 006

Azotech Solutions

No.8, 2nd floor, Above Apollo Pharmacy,
Gopalsamykoil Street, Ganapathy,
Coimbatore – 641006.
Contact : +91 72000 33312



CERTIFICATE OF INTERNSHIP

This is to certify that **RITIK KUMAR** has done internship at **AZETECH SOLUTIONS** from
January 19, 2021 to February 05, 2021 on "**Knowledge Enrichment Program towards
Embedded Systems**" Under the Guidance of Mr. **ARUL NELSON.J.**

We have found him to be a self-starter who is motivated, duty bound and Hard-working.

He Worked sincerely on his assignments and his performance was **Par Excellence**.

We wish him best of luck for the future.


PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.



Date: 05.02.2021
Place: Coimbatore


Regards
Azotech Solutions
AZETECH SOLUTIONS
No.8, Gopalsamy Kevil Street,
Above Apollo Pharmacy,
GANAPATHY, COIMBATORE-641 006.

Azotech Solutions

No.8, 2nd floor, Above Apollo Pharmacy,
Gopalsamykoil Street, Ganapathy,
Coimbatore – 641006.
Contact : +91 72000 33312



CERTIFICATE OF INTERNSHIP

This is to certify that **SANOJ KUMAR** has done internship at **AZETECH SOLUTIONS** from
January 19, 2021 to February 05, 2021 on "**Knowledge Enrichment Program towards
Embedded Systems**" Under the Guidance of Mr. **ARUL NELSON.J.**

We have found him to be a self-starter who is motivated, duty bound and Hard-working.
He Worked sincerely on his assignments and his performance was **Par Excellence**.

We wish him best of luck for the future.

PRINCIPAL

JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.



Date: 05.02.2021
Place: Coimbatore

Regards

Azotech Solutions
AZETECH SOLUTIONS
No.8, Gopalassamy Kevil Street,
Above Apollo Pharmacy,
GANAPATHY, COIMBATORE-641 008.

Azotech Solutions

No.8, 2nd floor, Above Apollo Pharmacy,
Gopalsamykott Street, Ganapathy,
Coimbatore - 641006.
Contact : +91 72000 33312

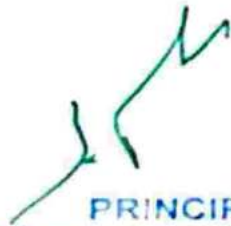


CERTIFICATE OF INTERNSHIP

This is to certify that **SHAHABUDDIN MANSURI** has done internship at **AZETECH SOLUTIONS** from January 19, 2021 to February 05, 2021 on "Knowledge Enrichment Program towards Embedded Systems" Under the Guidance of Mr. ARUL NELSON.J.

We have found him to be a self-starter who is motivated, duty bound and Hard-working.
He Worked sincerely on his assignments and his performance was Par Excellence.

We wish him best of luck for the future.


PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.



Date: 05.02.2021
Place: Coimbatore


Regards
Azetech Solutions
AZETECH SOLUTIONS
No.8, Gopalsamy Kott Street,
Above Apollo Pharmacy,
GANAPATHY, COIMBATORE - 641 006.



Date: 01-10-2021

To

Mr. Sasikumar Maveli Kizhakkayil,
Managing Director,
The Metal Industries Ltd,
Kerala – 679 122.

Dear Sir,

Sub: Internship program at METIND - Reg.

We students writing this letter to apply for internship at METIND, we enrolled in II Year, Electrical and Electronics Engineering, JCT College of Engineering and Technology, saw your internship training program posted on official website and would be thrilled to pursue this opportunity.

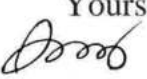
We will equip ourselves through this training and work on our best. Hope you accept our request and provide us training program.

Looking forward to hear back from you.

Thanking You



PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.

Yours,

Principal



THE METAL INDUSTRIES LIMITED

(A Govt. of Kerala Undertaking)

Metind Nagar, Shoranur - 679 122, Kerala

Tel. : 0466 2062208

Email : metind@thometalindustries.in

Website : www.thometalindustries.in

15-10-2021

INTERNSHIP ACCEPTANCE LETTER

Re: JCT College of Engineering

Dear,

I am pleased to confirm your acceptance of an internship training in the electrical system services with "The metal Industries Ltd.". Your duties and assignments will be provided with brief description on the day of joining. We are providing training from 22nd October, 2021 to 4th November, 2021 to your students of II Year, Electrical and Electronics Engineering.

If you have any questions, please feel free to contact. We are pleased to have you joining in our company.

Sincerely,

For The Metal Industries Ltd.,

Radhakrishnan.C,
Manager (Comml & Admin)



TRUSTED NAME IN AGRICULTURAL IMPLEMENTS

PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.





THE METAL INDUSTRIES LIMITED

(A Govt. of Kerala Undertaking)
Metalind Nagar, Shoranur - 676 122, Kerala
Tel. : 0400 2002208
Email : metalind@thometalindustries.in
Website : www.thometalindustries.in

Ref: C-12/21-22/561

16/11/2021

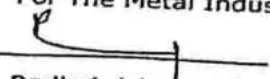
CERTIFICATE

This is to certify that **JAYAPRAKASH A**, B.E - Electrical & Electronics Engineering student, (Reg.No.720920105005), JCT College of Engineering & Technology, Coimbatore, has undergone INTERNSHIP PROGRAMME in this company, during the period from 22/10/2021 to 04/11/2021, as part of partial fulfillment of requirement of his course.

During the above period he had shown keen interest in learning industrial matters connected with his academic education.

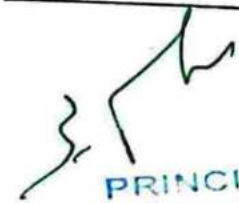
We wish him all success.

For The Metal Industries Ltd.,


Radhakrishnan.C,
Manager (Comm & Admin)



A TRUSTED NAME IN AGRICULTURAL IMPLEMENTS


PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.



THE METAL INDUSTRIES LIMITED

(A Govt. of Kerala Undertaking)

Melind Nagar, Shoranur - 679 122, Kerala

Tel : 0406 2002208

Email : melind@thometalindustries.in

Website : www.thometalindustries.in

Ref: C-12/21-22/562

16/11/2021

CERTIFICATE

This is to certify that **SARAVANAN B**, B.E - Electrical & Electronics Engineering student, (Reg.No.720920105016), JCT College of Engineering & Technology, Coimbatore, has undergone INTERNSHIP PROGRAMME in this company, during the period from 22/10/2021 to 04/11/2021, as part of partial fulfillment of requirement of his course.

During the above period he had shown keen interest in learning industrial matters connected with his academic education.

We wish him all success.

For The Metal Industries Ltd.,

Radhakrishnan.C,
Manager (Comm & Admin)



A TRUSTED NAME IN AGRICULTURAL IMPLEMENTS

PRINCIPAL

JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.



THE METAL INDUSTRIES LIMITED

(A Govt. of Kerala Undertaking)
Melind Nagar, Shoranur - 676 122, Kerala
Tel. : 0468 2002208
Email : metind@thometalindustries.in
Website : www.thometalindustries.in

Ref: C-12/21-22/563

16/11/2021

CERTIFICATE

This is to certify that **ASWIN R**, B.E - Electrical & Electronics Engineering student, (Reg.No.720920105303), JCT College of Engineering & Technology, Coimbatore, has undergone INTERNSHIP PROGRAMME in this company, during the period from 22/10/2021 to 04/11/2021, as part of partial fulfillment of requirement of his course.

During the above period he had shown keen interest in learning industrial matters connected with his academic education.

We wish him all success.

For The Metal Industries Ltd.,

Radhakrishnan.C,
Manager (Comm & Admin)



A TRUSTED NAME IN AGRICULTURAL IMPLEMENTS

PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.





THE METAL INDUSTRIES LIMITED

(A Govt. of Kerala Undertaking)

Melnd Nagar, Shoranur - 679 172, Kerala

Tel. 0495 2957798

Email : melnd@themetallindustries.in

Website : www.themetallindustries.in

Ref: C-12/21-22/564

16/11/2021

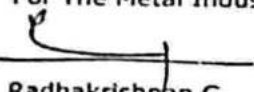
CERTIFICATE

This is to certify that **FUHAD K. B.E** - Electrical & Electronics Engineering student, (Reg.No.720920105306), JCT College of Engineering & Technology, Coimbatore, has undergone INTERNSHIP PROGRAMME in this company, during the period from 22/10/2021 to 04/11/2021, as part of partial fulfillment of requirement of his course.

During the above period he had shown keen interest in learning industrial matters connected with his academic education.

We wish him all success.

For The Metal Industries Ltd.,


Radhakrishnan.C.,
Manager (Comm & Admin)



A TRUSTED NAME IN AGRICULTURAL IMPLEMENTS


PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.



**THE METAL INDUSTRIES LIMITED***(A Govt. of Kerala Undertaking)*

Metalind Nagar, Shoranur - 676 122, Kerala

Tel. : 0466 2062208

Email : metalind@thometalindustries.in

Website : www.thometalindustries.in

Ref: C-12/21-22/565

16/11/2021

CERTIFICATE

This is to certify that **SRIKANTH M**, B.E - Electrical & Electronics Engineering student, (Reg.No.720920105311), JCT College of Engineering & Technology, Coimbatore, has undergone INTERNSHIP PROGRAMME in this company, during the period from 22/10/2021 to 04/11/2021, as part of partial fulfillment of requirement of his course.

During the above period he had shown keen interest in learning industrial matters connected with his academic education.

We wish him all success.

For The Metal Industries Ltd.,

Radhakrishnan.C,
Manager (Comm & Admin)



A TRUSTED NAME IN AGRICULTURAL IMPLEMENTS

PRINCIPAL

JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.





Date: 01-07-2021

To

Mr. V. Mahadevan,
Assistant Manager,
Larsen & Toubro,
Chennai – 600 089.

Dear Sir,

Sub: Internship training at Larsen & Toubro - Reg.

We students of II Year, Electrical and Electronics Engineering, JCT College of Engineering and Technology, heard your internship program through your website and would be pleased to volunteer for it.

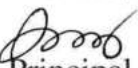
We request you to accept our request and provide us training program. We will adhere to timings and venue and provide full co operation throughout the period.

Hope to hear from you soon. Thanking you in anticipation

Regards




PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.

Yours,

Principal

July 15, 2021

INTERNSHIP OFFER LETTER

This is in response to your application for internship with Larsen & Toubro. Ltd. We would like to extend heartiest congratulations on your selection for internship with Larsen & Toubro.ltd. Based at Kochi, Kerala. Your internship will start from August 2nd, 2021 and will complete on August 31st, 2021. You will be required to report to Mr. Pankaj on your date of joining. Our team at Larsen & Toubro. Ltd. are looking forward to have you work with us.

During your internship, the concentration will be on helping you understand the theoretical concepts with their practicality and implications to help you connect your classroom knowledge and on-field experience. We will be happy to train you to learn new skills which are extremely helpful in the professional setting.

Given below is the address where you have to report for internship:

Larsen & Toubro. Ltd

Kochi

New Delhi

Once again, congratulations to you on your selection and all the best for your endeavors.


PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.



Yours faithfully,
LARSEN & TOUBRO LIMITED



(ASHIM HARSH)
People Partner – SS & TLSBG SOUTH



Larsen & Toubro Limited,
Construction
Power Transmission & Distribution
P. B. No. 979, Mount Poonamallee Road,
Manapakkam,
Chennai - 600 089, INDIA
Tel : +91-44-2252 6000, 2252 8000
Fax : +91-44-2270 5482
www.Lntecc.com

September 01, 2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr. MRIDHUL RAJU (Reg# 720920105011)**, 2nd Year B.E. Electrical & Electronics Engineering Student of JCT College of Engineering & Technology, Coimbatore has completed his internship on the topic "**Commissioning of 400/230 kV GIS Substations**" in our organization during 02.08.2021 to 31.08.2021.

His conduct and performance during the above mentioned period was good.

We wish him all the best.

Yours faithfully,
for LARSEN & TOUBRO LIMITED

PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

(ASHIM HARSH)
People Partner – SS & TL SBG SOUTH



Registered Office: L&T House, N. M. Marg, Ballard Estate, Mumbai - 400 001, INDIA
Licence No.: CIN - L99999MH1946PLC004768

L&T Construction - Power Transmission & Distribution is a brand of Larsen & Toubro Limited



Larsen & Toubro Limited,
Construction
Power Transmission & Distribution
P. B. No. 979, Mount Poonamallee Road,
Manapakkam,
Chennai - 600 089, INDIA
Tel : +91-44-2252 6000, 2252 8000
Fax : +91-44-2270 5482
www.Lntecc.com

September 01, 2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr. AMARNATH M (Reg# 720920105301)**, 2nd Year B.E. Electrical & Electronics Engineering Student of JCT College of Engineering & Technology, Coimbatore has completed his internship on the topic "**Commissioning of 400/230 kV GIS Substations**" in our organization during 02.08.2021 to 31.08.2021.

His conduct and performance during the above mentioned period was good.

We wish him all the best.

Yours faithfully,
for LARSEN & TOUBRO LIMITED

(ASHIM HARSH)
People Partner – SS & TL SBG SOUTH




PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

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September 01, 2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. ASHIQ S (Reg# 720920105302), 2nd Year B.E. Electrical & Electronics Engineering Student of JCT College of Engineering & Technology, Coimbatore has completed his internship on the topic "Commissioning of 400/230 kV GIS Substations" in our organization during 02.08.2021 to 31.08.2021.

His conduct and performance during the above mentioned period was good.

We wish him all the best.



Yours faithfully,
for LARSEN & TOUBRO LIMITED

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People Partner – SS & TL SBG SOUTH


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September 01, 2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr. HARIKRISHNAN T (Reg# 720920105308)**, 2nd Year B.E. Electrical & Electronics Engineering Student of JCT College of Engineering & Technology, Coimbatore has completed his internship on the topic "**Commissioning of 400/230 kV GIS Substations**" in our organization during 02.08.2021 to 31.08.2021.

His conduct and performance during the above mentioned period was good.

We wish him all the best.

Yours faithfully,
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September 01, 2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. MANASA G (Reg# 720920105312), 2nd Year B.E. Electrical & Electronics Engineering Student of JCT College of Engineering & Technology, Coimbatore has completed his internship on the topic "Commissioning of 400/230 kV GIS Substations" in our organization during 02.08.2021 to 31.08.2021.

His conduct and performance during the above mentioned period was good.

We wish him all the best.

Yours faithfully,
for LARSEN & TOUBRO LIMITED

(ASHIM HARSH)
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September 01, 2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr. VENKATA SANTHOSH (Reg# 720920105313)**, 2nd Year B.E. Electrical & Electronics Engineering Student of JCT College of Engineering & Technology, Coimbatore has completed his internship on the topic "**Commissioning of 400/230 kV GIS Substations**" in our organization during 02.08.2021 to 31.08.2021.

His conduct and performance during the above mentioned period was good.

We wish him all the best.

Yours faithfully,
for LARSEN & TOUBRO LIMITED



(ASHIM HARSH)
People Partner – SS & TL SBG SOUTH

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Date: 01-07-2021

To

Mr. S. Anand,
Regional Manager,
IPCS Automation,
Kerala – 682035.

Dear Sir,

Sub: Internship program at IPCS automation - Reg.

We students of II Year, Electrical and Electronics Engineering, JCT College of Engineering and Technology, heard your internship program through your website and would be pleased to volunteer for it.

We request you to accept our request and provide us training program. We will adhere to timings and venue and provide full co operation throughout the period.

Hope to hear from you soon. Thanking you in anticipation

Regards


PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.



Yours,


Principal



15-07-2021

INTERNSHIP OFFER LETTER

Dear,

On behalf of the IPCS Global automation Services LLP, we would like to notify you of this opportunity for an internship. On your acceptance of this offer, you can continue an internship with the company on 27-07-2021.

You will not get the benefits of regular employees since it's a training. We assure to provide you the best of ours and make you a skilled people at the end of the training.

We promise you that the details of your particulars we have collected during your program should be saved in our covert privately.

We appreciate your interest in our company.

Warm regards,

IPCSGLOBAL SERVICES LLP

BRANCH HEAD

PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.



IPCSGLOBAL SERVICES LLP
Beejay Tower 4th Floor
Rajaji Road, Shenoy's
Cochin - 682 035

Global Training Provider

Corporate Training & Manpower Supply

IPCSGLOBAL SERVICES LLP

4th Floor, Beejay Towers - Rajaji Road, Shenoy's Ernakulam, Kerala - 682035
Tel : 0484 404 6664 | Email : chn@ipcsglobal.com | www.ipcsglobal.com
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Date: 06.08.2021

TO WHOM IT MAY CONCERN

This is to certify that **Mr. SIJIL JOHNSON** has done his internship in **INDUSTRIAL AUTOMATION** for **10 days** at **IPCS GLOBAL SERVICES LLP** Cochin Branch from **27-07-2021 to 06-08-2021**.

As part of the project, he has performed the task **SIEMENS PLC**.

During the internship period he demonstrated good design skills with a self-motivated attitude to learn new things. His performance exceeded expectations and was able to complete the project successfully on time.

We wish him all the best for his future endeavors.

With Warm regards,

IPCSGLOBAL SERVICES LLP

BRANCH HEAD

IPCSGLOBAL SERVICES LLP
Beejay Tower 4th Floor
Rajaji Road, Shenoy's
Cochin - 682 035



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Date: 06.08.2021

TO WHOM IT MAY CONCERN

This is to certify that **Mr. VISHNU B** has done his internship in **INDUSTRIAL AUTOMATION** for **10 days** at **IPCS GLOBAL SERVICES LLP** Cochin Branch from **27-07-2021** to **06-08-2021**.

As part of the project, he has performed the task **SIEMENS PLC**.

During the internship period he demonstrated good design skills with a self-motivated attitude to learn new things. His performance exceeded expectations and was able to complete the project successfully on time.

We wish him all the best for his future endeavors.

With Warm regards,

IPCSGLOBAL SERVICES LLP

BRANCH HEAD

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Beejay Tower 4th Floor
Rajaji Road, Shenoy's
Cochin - 682 035

Global Training Provider

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Date: 06.08.2021

TO WHOM IT MAY CONCERN

This is to certify that Mr. AYYAPPADAS K.M has done his internship in **INDUSTRIAL AUTOMATION** for 10 days at **IPCS GLOBAL SERVICES LLP** Cochin Branch from **27-07-2021 to 06-08-2021**.

As part of the project, he has performed the task **SIEMENS PLC**.

During the internship period he demonstrated good design skills with a self-motivated attitude to learn new things. His performance exceeded expectations and was able to complete the project successfully on time.

We wish him all the best for his future endeavors.

With Warm regards,

IPCSGLOBAL SERVICES LLP

BRANCH HEAD

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Rajaji Road, Shenoy's
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Date: 06.08.2021

TO WHOM IT MAY CONCERN

This is to certify that Mr. DIKUL has done his internship in INDUSTRIAL AUTOMATION for 10 days at IPCS GLOBAL SERVICES LLP Cochin Branch from 27-07-2021 to 06-08-2021.

As part of the project, he has performed the task SIEMENS PLC.

During the internship period he demonstrated good design skills with a self-motivated attitude to learn new things. His performance exceeded expectations and was able to complete the project successfully on time.

We wish him all the best for his future endeavors.

With Warm regards,

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BRANCH HEAD

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Date: 06.08.2021

TO WHOM IT MAY CONCERN

This is to certify that MISS RESHMA G has done his internship in INDUSTRIAL AUTOMATION for 10 days at IPCS GLOBAL SERVICES LLP Cochin Branch from 27-07-2021 to 06-08-2021.

As part of the project, he has performed the task SIEMENS PLC.

During the internship period he demonstrated good design skills with a self-motivated attitude to learn new things. His performance exceeded expectations and was able to complete the project successfully on time.

We wish him all the best for his future endeavors.

With Warm regards,

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BRANCH HEAD

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Beejay Tower 4th Floor
Rajaji Road, Shenoy's
Cochin - 682 035



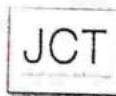
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JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

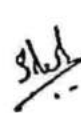
S.NO	BATCH NO	REG NO	NAME OF THE STUDENT	TITLE	GUIDE NAME
1	I	720919105019	Dhiraj Kumar Pandit	IoT based door lock system	MR.NAGARAJAN.D,AP/EE
2		720919105006	Sathish Kumar R		
3		720919105004	Madhavan V		
4		720919105005	Praveen Kumar P		
5	II	720919105001	Akilan M	Load frequency of two areas power system	MR.LOHESWARAN.S, AP/EEE
6		720919105003	Lino K V		
7		720919105301	HariharaSudhan M		
8		720919105305	Vibin M		
9	III	720919105302	Mohammed Imran J	Comparison of algorithm in PV system	MS.KAVYALAKSHMI.A,AP/EEE
10		720919105024	Hari Kishor Kumar		
11		720919105303	Maris Rahul K		
12		720919105304	Varun Ps		
13	IV	720919105029	Mantu Kumar	Half wave rectifier with filter circuits	MR.PRASANTH.R.K/AP/EEE
14		720919105007	Syam S		
15		720919105008	Vimal A		
16		720919105009	Vishnuraj C		

[Signature]

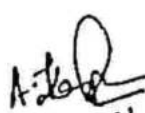
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[Signature]
Dr.K.GEETHA, M.E.,Ph.D.,
Head of the Department
Department of Electrical & Electronics Engg
JCT College of Engineering and Technology
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S.No	BATCH NO	REG NO	NAME	GUIDE NAME	SIGNATURE OF THE GUIDE
1	BATCH - I	720919105019	DHIRAJ KUMAR PANDIT	Mr. NAGARAJAN D Asst. Prof/EEE	
2		720919105006	SATHISH KUMAR R		
3		720919105004	MADHAVAN.V		
4		720919105005	PRAVEEN KUMAR P		
5	BATCH - II	720919105001	AKILAN.M	Mr. LOHESWARAN S Asst. Prof/EEE	
6		720919105003	LINO K V		
7		720919105301	HARIHARA SUDHAN M		
8		720919105305	VIBIN M		
9	BATCH - III	720919105302	MOHMMED IMRAN J	Ms. KAVYALAKSHMI A Asst. Prof/EEE	
10		720919105024	HARI KISHOR KUMAR		
11		720919105303	K MARIS RAHUL		
12		720919105304	VARUN PS		
13	BATCH - IV	720919105029	MANTU KUMAR	Mr. PRASANTH R K Asst. Prof/EEE	
14		720919105007	SYAM.S		
15		720919105008	VIMALA		
16		720919105009	VISHNURAJ.C		




Faculty Coordinator


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Dr. K. GEETHA Ph.D.,
Head of the Department
Department of Electrical & Electronics Engg
JCT College of Engineering and Technology
Coimbatore - 641 105.

ANNA UNIVERSITY:



CHENNAI 600 025

BONAFIDE CERTIFICATE

Certified that this project report "OTP BASED DOOR LOCK SYSTEM" is the bonafide work of "MADHAVAN.V , PRAVENKUMAR, SATHISH KUMAR ,DHIRAJ KUMAR PANDIT" who carried out the project work under my supervision.




SIGNATURE

Dr.K.Geetha M.E.,Ph.D.,

HEAD OF THE DEPARTMENT

Department of EEE

JCT College of Engg& Tech

Pichanur, Coimbatore-641105.


SIGNATURE

Prof.D.Nagarajan M.E,

SUPERVISOR

Department of EEE

JCT College of Engg&
Tech

Pichanur, Coimbatore-
641105.

Submitted for the Project viva-voce held on 25/6/22


INTERNAL EXAMINER


EXTERNAL EXAMINER


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JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

ABSTRACT

As thefts are increasing day by day security is becoming a major concern, nowadays. Traditional lock systems using mechanical lock and key mechanism are being replaced by password based door locks. If the owner enters the correct password, the door will open. Even though the password based door lock system provides much higher security than the traditional lock system, it has its own drawbacks. There is a high risk of password leakage. This problem can be solved using **OTP technology**. It provides double security for our household and lockers. It avoids the access of third person. This work discusses the design and implementations of a door lock/unlock compact system using the arduino platform. The owner enters the password through the keypad. The arduino will check if the password is correct or not. If the password is correct, arduino will sent the OTP to the owner's mobile phone through the GSM. The arduino will check the OTP entered through the keypad. The door will open if the OTP is correct.




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5.2 CONCLUSION:

This project presents solution to the password leakage. It provides enough security as long as the mobile phone is in owner's hand. This system allows single-person resident to relieve the anxiety caused by the password leakage and making solve growing social problems occurring in households. Thus a common man can afford to buy such locking system in minimal cost. In future "OTP Based Door Lock System" can be improved by controlling the lock through smart phone using IOT. This system needs constant power supply and it can't be used in multiple-person residents.




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ANNA UNIVERSITY: CHENNAI 600 025

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Certified that this project report "LOAD FREQUENCY CONTROL OF TWO AREA SYSTEM USING PID CONTROLLER" is the bonafide work of "M. AKILAN, HARI HARA SUDHAN M, LINO K V, VIBIN M" who carried out the project work under my supervision.


SIGNATURE

Dr.K.Geetha M.E.,Ph.D.,

HEAD OF THE DEPARTMENT

Department of EEE

JCT College of Engg& Tech

Pichanur, Coimbatore-641105.



SIGNATURE

Loheshwaran M.E,

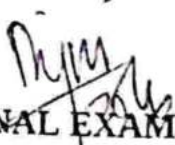
SUPERVISOR

Department of EEE

JCT College of Engg& Tech

Pichanur, Coimbatore-641105.

Submitted for the Project viva-voce held on 25/06/2022


INTERNAL EXAMINER




EXTERNAL EXAMINER


PRINCIPAL
JCT College of Engineering & Technology
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ABSTRACT

This research project presents decentralized control scheme for Load Frequency Control in a multi-area Power System by appreciating the performance of the methods in a single area power system. A number of modern control techniques are adopted to implement a reliable stabilizing controller. A serious attempt has been undertaken aiming at investigating the load frequency control problem in a power system consisting of two power generation unit and multiple variable load units. The robustness and reliability of the various control schemes is examined through simulations.



A handwritten signature in black ink, consisting of stylized loops and a long horizontal stroke.

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The project presents a case study of designing a controller that can bear desirable results in a two area power system when the input parameters to the system is changed. Two methods of Load Frequency Control was studied taking an isolated power system into consideration. It was seen that the Optimal controller design bore better results and achieved desired reliability under changes in the input parameter. Hence an attempt was made to extend the Optimal Control design to a two area network. The assumptions taken under consideration strictly followed that the system operation was normal throughout and the simulations were obtained without the presence of the integral controllers. Lyapunov stability study revealed that by minimizing the system performance index the optimal controller can be designed that improves the system stability and performance drastically over the pole placement method with extensively depended on trial and error process. In fact there is a huge scope of improvement in this area where the power system study can be extended to a multi-area system that shall ensure stability in closed loop system.



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ANNA UNIVERSITY: CHENNAI 600025

BONAFIDE CERTIFICATE

Certified that this project report "COMPARISON OF ALGORITHMS IN PV SYSTEM" is the bonafide work of "HARI KISHOR KUMAR, MOHAMMED IMRAN J, MARIS RAHUL K, VARUN PS" who carried out the project work under my supervision.

SIGNATURE

**Dr. K. GEETHA M.E., Ph.D.,
HEAD OF THE DEPARTMENT**

Department of EEE
JCT college of Engg & Tech
Pichanur, Coimbatore-641105

SIGNATURE

**A. KAVYALAKSHMI M.E
ASSISTANT PROFESSOR**

Department of EEE
JCT college of Engg & Tech
Pichanur, Coimbatore-641105

Submitted for the project viva-voce held on... 25-06-2022

INTERNAL EXAMINER

EXTERNAL EXAMINER



PRINCIPAL

JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

ABSTRACT

In the photovoltaic system the load connected is nonlinear which creates harmonics in the panel during the maximum power point tracking (MPPT). This is one among the main causes for the efficiency drop in maximum power point tracking (MPPT). There is a wide spectrum or discrete frequencies of harmonics produced by the inverter. If the harmonics created by the inverter are reduced, the efficiency of PV panel can be maintained. At constant duty cycle, applying fast sampling rate will increase the system efficiency and also increases the harmonics production with increased output voltage.

In the proposed system, perturb and observe algorithm and incremental conductance algorithms are used to reduce the harmonics in the PV system, in order to maintain the efficiency of the photovoltaic system. In perturb and observe algorithm, the voltage is perturbed in forward direction and then in reverse directions towards maximum power point. In incremental conductance algorithm, the voltage and current is taken as feedback to achieve maximum power. By employing random sampling interval between slow and fast, the interharmonics can be effectively reduced. The performance and effectiveness are validated experimentally based on the reduced level of harmonics and efficiency of MPPT in PV system.


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CHAPTER 7

CONCLUSION

The disadvantage of Perturb and Observe method to track the peak power accurately under fast varying atmospheric conditions is overcome by incremental conductance method. The output voltage of Incremental Conductance is high. Total Harmonic Distortion created is low while using Incremental Conductance MPPT Algorithm when compared with P&O algorithm. By implementing random samplings the interharmonics are reduced. The efficiency is also maintained by the usage of Incremental conductance algorithm.

BONAFIDE CERTIFICATE

Certified that this project report "HALF-WAVE & FULL WAVE RECTIFIER WITH FILTER CIRCUIT" is the bonafide work of "MANTU KUMAR, SYAM S, VIMAL A AND VISHNURAJ C" who carried out the project work under my supervision.

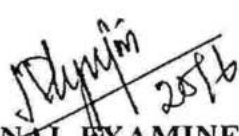

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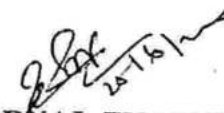
Dr. K GEETHA
HEAD OF DEPARTMENT
EEE JCT College of
Engineering and Technology


SIGNATURE

PRASANTH R K (ASP) &
SUPERVISOR JCT College
of Engineering and
Technology

Submitted for the Project viva-voce held on 25.06.2022


INTERNAL EXAMINER


EXTERNAL EXAMINER


PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.





ABSTRACT

The rectifier converts the ac input voltage to a pulsating dc voltage. This diode limits the current flow in one direction. This means that only half of the AC waveform can pass through the diode. The study of Half wave Rectifier of single phase AC to DC converter. Performances and outputs have analyzed depending on the equations. Different parameters such as voltage gain, harmonic contents in input current, and parameters of changing output voltage are compared different type of single phase AC to DC converters. AC to DC converter is defined as rectifier. A widely used application of this feature and diodes in general is in the conversion of an alternating voltage (AC) into a continuous voltage (DC). In other words, Rectification. But small signal diodes can also be used as rectifiers in low-power, low current (less than 1-amp) rectifiers or applications, but where larger forward bias currents or higher reverse bias blocking voltages are involved the PN junction of a small signal diode would eventually overheat and melt so larger more robust Power Diodes are used instead. The power semiconductor diode, known simply as the Power Diode, has a much larger PN junction area compared to its smaller signal diode cousin, resulting in a high forward current capability of up to several hundred amps (KA) and a reverse blocking voltage of up to several thousand volts (KV).

There are two Types of Rectifier:-

10




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CONCLUSION

- Half wave rectifier is a simple circuit.
- It has a low cost.
- We can easy to use it.
- We can easily construct.
- It has a low number of component, therefore it is cheap.
- The current on the DC side of the circuit flows in one direction only making the circuit Unidirectional.
- As the load resistor receives from the diode a positive half of the waveform, zero volts, a positive half of the waveform, zero volts, etc, the value of this irregular voltage would be equal in value to an equivalent DC voltage of $0.318 \times V_{max}$ of the input sinusoidal waveform or $0.45 \times V_{rms}$ of the input sinusoidal waveform.

we require a DC that does not change with time. To overcome this problem and to get a smooth DC, there will be solutions namely filter. The energetic DC mainly includes both AC & DC components. So here filter is used to remove or reduce the AC components at the output. The filter can be built with components like resistors, capacitors, and inductors. The circuit diagram of half wave rectifier using a capacitor filter is shown above. This circuit is built with a resistor and capacitor. Here, the connection of the capacitor 'C' is in shunt with the 'RL' load resistor.

Whenever AC voltage is applied to the circuit throughout the positive half cycle, then the diode lets the flow of current through it. We know that the capacitor gives high-resistive lane to DC components as well as low-resistive lane to AC components. The flow of current always chooses to supply through a low resistance lane.

So when the flow of current gets the filter, the ac components experience a low-resistance and dc components experience a high-resistance from the capacitor.

The DC components flow through the load resistor (low resistance path).



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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

S.NO	REG NO	NAME	BATCH	TITLE	PROJECT GUIDE
1.	720918105002	Adwaith.N	I	IoT Based Solar Powered Agri Spraying Robot Using Lora	A.Kavyalakshmi
2.	720918105003	Afhas Ali P M			
3.	720918105007	Ansar Mohamed.S			
4.	720918105008	Arunkumar.J			
5.	720918105004	Ajayraj.R	II	IoT Based Home Automation Using Android	Angel Joseph.P
6.	720918105006	Amal.S			
7.	720918105017	Sreeraj.M			
8.	720918105018	Thilagesh.T			
9.	720918105009	Dawn Shaju	III	Wireless Electric Vehicle Battery Charging System	S.Umarmukhtar
10.	720918105013	Muhammed Ansari.J			
11.	720918105016	S.MohammedHaneefa			
12.	720918105302	Rishikesh K P			
13.	720918105010	Gomathi.M	IV	IoT Asset Tracking	D.Nagarajan

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14.	720918105011	Kannan.S		System		
15.	720918105012	Karthikeyan M				
16.	720918105901	Vasantharaja A				
17.	720918105014	Muralidharan R	V	IoT Based Gas Pipe Leakage Detector Using Insect Rbot	P.Sam Jasper	
18.	720918105015	Pugazhenth S				
19.	720918105019	Vivek M				
20.	720918105303	Subash A				




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 IV-EEE-Project Name List



S.NO	BATCH NO	REG NO	NAME	GUIDE NAME	SIGNATURE OF THE GUIDE
1	BATCH-I	720918105004	AJAYRAJ.R	Mr.JEGAN RUPAN CHAND J Asst.Prof/EEE	
2		720918105006	AMAL.S		
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7		720918105010	GOMATHI.M		
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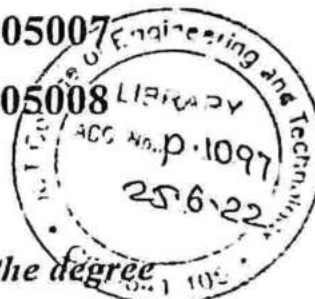
IoT BASED SOLAR POWERED AGRI SPRAYING ROBOT USING LORA



A PROJECT REPORT

Submitted by

ADWAITH.N	720918105002
AFHAS ALI.P.M	720918105003
ANSAR MOHAMED.S	720918105007
ARUNKUMAR.J	720918105008



In partial fulfillment for the award of the degree

of

BACHELOR OF ENGINEERING

In

ELECTRICAL AND ELECTRONICS ENGINEERING

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BONAFIDE CERTIFICATE

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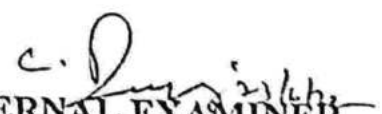
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INTERNAL EXAMINER


EXTERNAL EXAMINER


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ABSTRACT

A majority of the population of developing countries is associated with agriculture directly or indirectly. The liaison of engineering technology and Sustainable Development Goals (SDGs) can build a bridge for farmers to enhance their skills regarding advancements through future generation agriculture trends. The next-generation trends include better soil preparation, intelligent irrigation systems, advanced methods of crop nutrient inspection, smart fertilizers applications, and multi-cropping practices. This work proposes a smart Decision Support System (DSS) that acquires the input parameters based on real-time monitoring to optimize the yield that realizes sustainability by improving per hectare production and lessening water seepage wastage in agribusiness. The proposed model comprises three basic units including an intelligent sensor module, smart irrigation system and controlled fertilizer module. The system

has integrated sensors, cloud employing decision support layers, and networking based DSS to recommend cautions for optimum sustainable yield. The intelligent sensors module contains a temperature and humidity sensor, NPK sensor, soil moisture sensor, soil conductivity sensor,

and pH sensor to transmit the statistics to the cloud over the internet via Long Range (LoRa) using Serial Peripheral Interface (SPI) communication protocol. Moreover, an android application has been developed for real-time data monitoring according to GPS location and node information (accessed remotely). Furthermore, the DSS contemplates the accessible information from sensors, past patterns, monitoring climate trends and creating cautions required for sustainable fertilizer consumption. The presented results and comparison validate

the novelty of the design as it embraces smart irrigation with smart control and smart decision-making based on accurate real-time field data. It is better than existing systems as it transmits the data over the LoRa that is an open-source communication with long-range transmission ability up to several kilometres. The sensor nodes helped in advancing the yield of crops, which resulted in achieving inclusive and sustainable economic goals.

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CHAPTER 6

CONCLUSION AND FUTURE ENHANCEMENT

The prototype of the project has shown that the farmer is able to spray the pesticides to the crops by this robotic model without any harm. This project solves real time crucial problem faced in agriculture. This system is quite affordable and feasible and also is adjusted according to the need of varieties of crop to spray pesticide. This project is economical and can be easily implemented in real time, thus balancing both the cost and benefits.

In future, this proposed model can be enhanced by adopting new advanced computer technology, we can make a full automatic spray. And implementing the telescopic nozzle we can adjust the length of the spray required. Also using the hydraulics system to the wheel, helps in varying the ground clearance.




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Certified that this project report "IOT BASED HOME AUTOMATION USING ANDRIOD" is the bonafide work of "AJAYRAJ.R, AMAL.S, SREERAJ.M, THILAGESH.T" who carried out the project work under my supervision.


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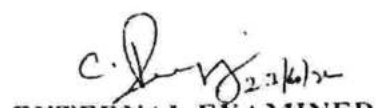



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INTERNAL EXAMINER


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ABSTRACT

IOT or internet of things is an upcoming technology that allows us to control hardware devices through the internet. Here we propose to use IOT in order to control home appliances, thus automating modern homes through the internet. This system uses three loads to demonstrate as house lighting and a fan. Our user friendly interface allows a user to easily control these home appliances through the internet. For this system we use an AVR family microcontroller.

This microcontroller is interfaced with a WIFI modem to get user commands over the internet. Also we have an LCD display to display system status. Relays are used to switch loads. The entire system is powered by a 12 V transformer. After receiving user commands over the internet, microcontroller processes these instructions to operate these loads accordingly and display the system status on an LCD display. Thus this system allows for efficient home automation over the internet.


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CHAPTER 8

CONCLUSION

This AC power control system has numerous applications in the domestic as well as industrial areas. In conclusion, this low cost system is to design to improve the standard living in home. The remote control function by smart phone provides help and assistance especially to disabled and elderly. Furthermore modern day wireless technologies like IOT and Bluetooth etc means remote control from a faraway distance is easily possible. This increases its scope and helps in better resolving of safety issues. The developed system eliminates the stress of human manual switching and to introduce flexibility of control without direct contact to switches even such that could be easily done via an android phone application at any comfortable point at domestic premises within the wireless coverage distance. The system makes switching boundless within the Bluetooth 7m coverage. Thus this paper has achieved its target using the architecture of a Bluetooth based switching automation of domestic electrical powered appliances through application software on android phone platform. With this, user can switch appliances 'ON' and 'OFF' on his/her bed or any comfortable spot through hand android phone. Nevertheless, the user usage distant is limited to the Bluetooth coverage length of about 7 meters. Future research may be geared towards developing a household switching device that can beyond 7m coverage however without charges. Two layers circuit board can be designed and used in place of single layer circuit board for easier soldiering work and neatness to commercialize the product 2 OFF





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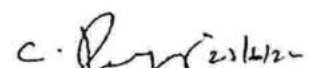



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ABSTRACT

Wireless charging is becoming popular all over the world to charge the electric vehicle (EV). But an EV cannot go too far with a full charge. It will need more batteries to increase its range. Dynamic wireless charging is introduced to EVs to capitally increase their driving range and get rid of heavy batteries. Some modern EVs are getting off this situation. But with Dynamic WPT the need of plug-in charge and static WPT will be removed gradually and the total run of an EV can be limitless. If we charge an EV while it is driven, we do not need to stop or think for charging it again. Eventually, in the future the batteries can be also removed from EVs by applying this method in everywhere. Wireless charging needs two kinds of coils named the transmitter coil and the receiver coil. The receiver coil will collect power from the transmitter coil while going over it in the means of mutual induction. But the variation of distance between two adjacent coils affects the wireless power transfer (WPT). To see the variation in WPT, a system of two Archimedean coils of copper is designed and simulated for vertical and horizontal misalignment in Ansys Maxwell simulation software. The transfer power for 150 mm air gap is 3.74 kW and transfer efficiency are gained up to 92.4%. The charging time is around 1 hour and 39 minutes to fully charge its battery from 0 state for a 150mm air gap for an EV with 6.1 kW power may take. Also, a charging lane is designed for dynamic charging. Then the power transfer is calculated from mutual inductance when the EV is driven on a charging lane. From the load power, it can be calculated how further an EV can go with this extra power



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CHAPTER 9

CONCLUSION

An Inductive Power Transfer (IPT) system for an E-bike battery charging has been designed and assembled. The target is a 36 V 10 Ah LiFePO₄ battery and the power level ranges from 100 W to 250 W.

After the magnetic design of the IPT coils, the electric model of the coupling structure has been gained and acquired from an electronic simulation tool, in order to complete the design of the whole system.

A series-series (SS) compensation topology has been chosen for the capacitive net work that has been connected to the coupled coils. In the assembled open-loop prototype, a half-bridge converter in the transmitter side and a four-diode rectifier in the receiver side have been designed.

From the experimental results, a 79 % coupling efficiency for an about 100W level arises. A magnetic characterization of the region surrounding the assembled proto type has been made as well. According to the magnetic field exposure guidelines, by ICNIRP, a minimum 25 cm distance from the center of the system is suggested as safety distance .After the experimental measurements on the power efficiency, alternative solutions of power electronics and coupling structures have been investigated.

A Bi-Directional IPT system has been analyzed and an algorithm for its efficiency optimization has been proposed. Mathematical analysis has been validated through power electronics simulations.

For this system, an investigation has been carried out on different magnetic coupling structures, all compliant with an E-bike wheel, and the best option in terms of system efficiency and tolerance to lateral misalignment has been defined.

The investigation has been made according to the results of 3D magnetic simulations and heir elaboration.



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BONAFIDE CERTIFICATE

Certified that this project report "IOT ASSET TRACKING SYSTEM" is the bonafide work of "GOMATHI.M, KANNAN.S, KARTHIKEYAN.M, VASANTHARAJA.A" who carried out the project work under my supervision.

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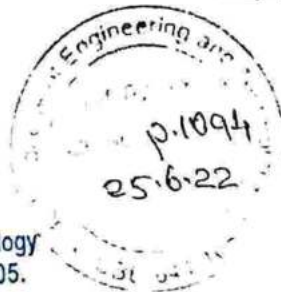
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INTERNAL EXAMINER

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ABSTRACT

Asset tracking is the method of asset of tracking an asset either by scanning barcode labels attached to the assets or by using tags using. these technologies can also be used for indoor tracking of equipment wearing a tag. the gps systems are today most well known location tracking systems.

These systems are not capable of pinpointing exact locations or locations of an entity within a building or on a particular floor or room. so we propose a smart asset tracking system it allows tracking the location of object.. in the proposed system it makes use of rf technology along with Iot to achieve this system. this system has the location tracking capability to exact room it is currently located in.
key words: asset tracking, internet of things (iot).


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CHAPTER 7

CONCLUSION

Web application for IOT based asset tracking system for hospital is developed for tracking the medical equipment. It is easy to track the medical equipment. It greatly reduces the time by managing this web application. Future work involves integrating the patient data in to the web application so that we can use this system for hospitals. This web application can surely help to improve the hospitals. Suitable Mobile Application for Hospital Asset Tracking will be created.



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BONAFIDE CERTIFICATE

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INTERNAL EXAMINER




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ABSTRACT

Gas pipes play very important roles for cities, industries and thus in growing economies. So gas leakages lead to losses as well as are a threat because they can also lead to fire accidents. Placing sensors at each section of pipe is very costly. So here we propose an innovative robot that clings on to the outer surface of the gas pipe and moves with the pipe to check for leakages. The robot consists of a gas sensor that is used to detect gas leakages. As the robot keeps moving along the metal pipe it keeps monitoring for any gas leakage. On detection it uses an interface gas sensor to transmit location of the leakage detected over to the IOT login system. Here we use IOTgecko to receive and display the gas leakage alert and location over IOT. Thus we have a fully automated insect like robot that moves with the gas pipe and detects gas leakages instantly at a low budget.



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CHAPTER 11

CONCLUSION

This project presents low cost, low power, and simple system for device control LPG leakage and fire situation. Additional details may include microcontrollers and GSM module. Industry has higher application in industry and domestic purpose where safety is very important.

After this project performance, can conclude that detection of the LPG gas leakage is incredible in the project system. Applicable usefully in the industrial and domestic purpose. In danger situations we are able to save the life by using this system. An alert is indicated by the GSM module. A sensor node senses gas like CO₂, oxygen, propane. The estimated range of transmission and consumption of power is obtained. The simple procedures and Arduino UNO Micro controller area used to build the sensor.

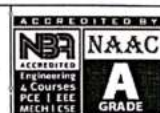


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JCT COLLEGE OF ENGINEERING AND TECHNOLOGY
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DEPARTMENT OF FOOD TECHNOLOGY

ACADEMIC YEAR 2021-2022 : FINAL YEAR PROJECT LIST

Team No.	Reg. No	Students name	Guide Name	PROJECT TITLE
1	720918218027 720918218011 720918218016 720918218004 720918218035	Manikandan.J Balasubrahmanyam.V Gokul Raj K.S Alwin.A Ragaventhira.V	Ms. J.Priyanka	DEVELOPMENT OF INSTANT MULTI GRAIN AND MILLET HEALTH MIX
2	720918218041 720918218028 720918218006 720918218043 720918218023	Shinaz Mahaboob Meljo paul Anand vinayak .P Siljo Joseph Joyal George	Ms. J.Priyanka	DEVELOPMENT OF PREBIOTIC SOYMILK BLENDED MILK CURD
3	720918218038 720918218049 720918218052 720918218054 720918218036	Rejwan Ali.A Tamil Bharathi S.N Vasanth Anbumani.P Hari Prakash.Y Ranjith. V	Dr. G.Gnanavel	JAMAICAN CHERRY INFUSED COOKIES
4	720918218051 720918218030 720918218031 720918218040 720918218039	Vajihe Sahle Mohamed Mohammed Ajmal Mohammad Rameez Shahid A.C Samir Kamal	Dr. G.Gnanavel	DEVELOPMENT OF READY TO DRINK (RTD) JUICE POWDER FROM RIPE PALMYRA FRUIT (BONRASSUS FLABELLIFER)
5	720918218003 720918218020 720918218007 720918218037	Aiswarya P Anil Jemin James Arundhathy Shabu Reema Thaseem	Ms.Deepa	EXAMINATION OF PHYSIOCHEMICAL ANALYSIS OF CUMIN ESSENTIAL OIL



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DEPARTMENT OF FOOD TECHNOLOGY
FINAL YEARS PROJECT LIST

6	720918218015 720918218002 720918218011 720918218046	D.Durga Dharshini M.Abinaya V.Balasubramani R.Soundhara Pandiyan	Mrs. Ruth Keziah	BREWING OF FIBRE INTEGRATED TEFF SODA WITH INFUSED PROBIOTICS
7	720918218034 720918218033	G.Preethisvar K.Pravin kumar	Dr.Sandhyarani.R	DEVELOPMENT OF HEALTHY SUGAR FREE CHOCOLATE FORTIFIED WITH VIT D3 & CALCIUM
8	720918218021 720918218026 720918218017 720918218018 720918218008	Jidhin Kiran Hari krishnan Hrithwik Arya K.S	Dr.Sandhyarani.R	DEVELOPMENT OF PROBIOTIC DATES YOGHURT ICE CREAM WITH ZINC FORTIFICATION
9	720918218019 720918218301 720918218013 720918218045 720918218009	Ismail Nadeemsha Binet M Vargheese Sooraj Asma Shirin	Mrs.Kohila	PREBOTIC FORTIFIED FLAVOURED MILK
10	720918218044	Sneha Vasudevan Nair	Mrs. Ruth Keziah	PARTICLE SIZE ANALYSIS OF ALL CHOCOLATE INTERMEDIATORY PRODUCTS AND ITS CORRELATION WITH FLOW ABILITY AND TEXTURAL PROPERTIES OF THE FINAL PRODUCT
11	720917218004 720918218024	Dharshana K.R P.Kalaimani	Ms.Deepa	FORMULATION OF MILLET BASED BALLS BY INCORPORATING ACALYPHA INDICA



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12	720918218012 720918218050	Bharathan.S Vaishnavi K.N	Dr.Suresh Chaluvadi	FORMULATION CHARACTERIZATION AND PHYSIOCHEMICAL EVALUATION OF MANGO POWDER EFFERVESCENT TABLET
13	720918218025 720918218029 720918218022 720918218048	Karthika.R Mithuna.K Johnesha christy Swetha Deborah.J	Dr.Suresh Chaluvadi	OPTIMIZATION OF TEFF BEER BREWING ALONG WITH DDITION OF FLAVORING SUBSTANCE
14	720918218042 720918218014	Shirley. D Dhilipkumar. M	Ms.Priyanka	DEVELOPMENT OF READY TO EAT KIBBLES BY INCORPORATING QUINOA BROWN RICE AND FISH BONE POWDER
15	720918218001 720918218005 720918218047	V.Abarnakartheeswari Amutha A Suruthi B	Ms.Deepa	METHOD DEVELOPMENT AND VALIDATION FOR THE ESTIMATION OF EPA AND DHA CONTENTS IN OMEGA3 FATTY ACID BY USING GAS CHROMATOGRAPHY


HoD




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**DEVELOPMENT OF HEALTHY SUGAR-FREE
CHOCOLATE FORTIFIED WITH VITAMIN D3
AND CALCIUM CARBONATE**



A PROJECT REPORT

Submitted by

PREETHISVAR G (720918218034)

PRAVIN KUMAR K (720918218033)

in partial fulfilment for the award of the degree of

**BACHELOR OF TECHNOLOGY
IN
FOOD TECHNOLOGY**

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JUNE 2022

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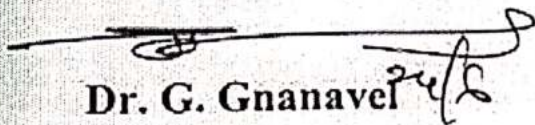
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BONAFIDE CERTIFICATE

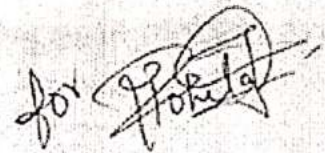
Certified that this Thesis titled "DEVELOPMENT OF HEALTHY SUGAR FREE CHOCOLATE FORTIFIED WITH VITAMIN D3 AND CALCIUM" is the bonafide work of "PREETHISVAR G (720918218033), PRAVIN KUMAR (720918218033)" who carried out the work under my supervision.

Submitted to the viva-voice examination held on ...24/06/2022.....


Dr. G. Gnanavel

Head of Department

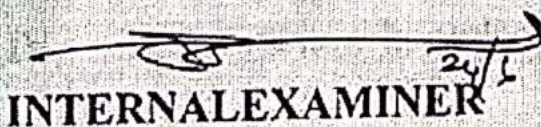
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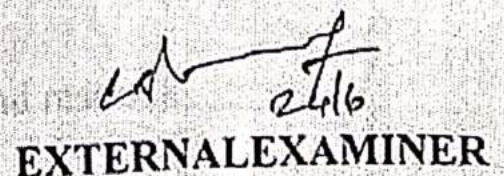


Dr. R. Sandhiya Rani

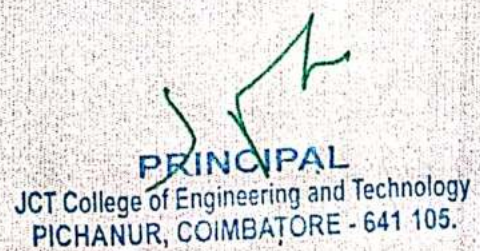
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INTERNALEXAMINER


EXTERNALEXAMINER




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ABSTRACT

In India 85% of people affected by deficiency of vitamin D and 46% of people affected by deficiency of calcium. In 2021 (74.2 Million) peoples are affected by diabetes in India. So we made a Fortified Sugar-Free Chocolates for these peoples, Chocolate is a favorite of everyone from the youngest to the oldest. In India widely consumed food items such a dairy products rarely fortified with Vitamin D. Vitamin D3 and calcium carbonate nano particles were used to fortify a newly developed healthy chocolate formulated with maltitol and Stevia as sugar replacers, This doesn't increase the Glucose level in the blood. Soy lecithin is an emulsifier added to chocolate to help bind the cocoa solids, Maltitol and Stevia so they stick to the cocoa butter. This improves the viscosity ("flowability") of the chocolate when it is melted. PGPR (polyglycerol polyricinoleate) has good thermal stability. The most important advantage in chocolate manufacturing is its ability in preventing crystals occur by reducing the viscosity of the chocolate slurry, thereby improving its fluidity, accelerating and optimizing the chocolate moulding process. Using these products to Development of healthy sugar-free chocolate fortified with vitamin d3 and calcium carbonate. In this study physiochemical, sensory, nutritional analysis and microbiological property of the developed sugar-free chocolate product was investigated. The developed sugar-free chocolate had higher shelf life, low fat and nutritional value when compared with that market samples.

Keywords: *vitamin D, Fortification, Viscosity, Emulsifier, Product Characteristics, Microbial Analysis, Shelf-life Study.*





DEVELOPMENT OF INSTANT MULTI- GRAIN AND MILLET HEALTH MIX



A PROJECT REPORT

Submitted by

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In partial fulfilment for the award of the degree of

BACHELOR OF TECHNOLOGY IN FOOD TECHNOLOGY

**JCT COLLEGE OF ENGINEERING AND TECHNOLOGY,
COIMBATORE**

JUNE - 2022



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BONAFIDE CERTIFICATE

Certified that this Thesis titled "DEVELOPMENT OF INSTANT MULTI GRAIN AND MILLET HEALTH MIX" is the Bonafide work of "ALWIN (720918218004), BALASUBRAHMANYAM V (720918218010), GOKULRAJ K S (720918218016), MANIKANDAN J (720918218027), and RAGAVENTHIRA V (720918218035)" who carried out the work under my supervision.

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ABSTRACT

A highly nutritious health mix was developed using locally available high grade staple cereals, pulses and cardamom. The health mix was developed using a combination of Bengal gram, red rice flakes, green gram, wheat, pearl millet, corn, foxtail millet, finger millet, sorghum, black gram, peanut, almond and cashew. These cereals and pulses are rich in both macronutrients and micronutrients such as carbohydrates, protein (and also has wide amino acid profile), fats, vitamins, dietary fibre, magnesium, zinc, potassium, calcium and iron. These nutrient rich food items are the key factor in developing a well formulated health mix to prevent malnutrition and under nutrition among poor communities. The functional properties, nutritional composition and sensory evaluation of the health mix was analysed. The nutritive value of the developed health mix was found to be better and profound than the other mixes available in the commercial market. The sensory evaluation of the product revealed that the colour, taste, texture, aroma, appearance and overall quality of the health mix was within the acceptable range and with a mean score of 8.1. The objective of this study was aimed at developing a highly nutritive instant multigrain and millet health mix at affordable price.

Keywords: *Health-Mix, Nutrition, Diabetes, Diabetic Patients, Anti-nutrients, Bioaccessibility, Affordability, Commercial Purpose.*



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DEVELOPMENT PREBIOTIC SOYMILK BLENDED MILK CURD



PROJECT REPORT

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MELJO PAUL	(720918218028)
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BACHELOR OF TECHNOLOGY IN FOOD TECHNOLOGY

**JCT COLLEGE OF ENGINEERING AND TECHNOLOGY,
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JUNE 2022



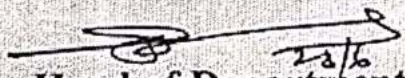
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JCT College of Engineering and Technology
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CHENNAI 600025**

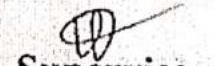
BONAFIDE CERTIFICATE

Certified that this Thesis titled "DEVELOPMENT OF PREBIOTIC SOYMILK BLENDED MILK CURD" is the bonafide work of "ANAND VINAYAK P (720918218006), JOYAL GEORGE (720918218028), MELJO PAUL (720918218028), SHINAZ MAHABOOB (720918218041), SILJO JOSEPH (720918218043)" who carried out the work under my supervision.

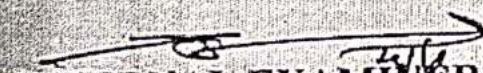
Committed for the final semester practical examination conducted on
24/06/2022.

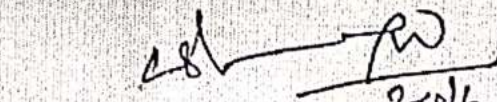

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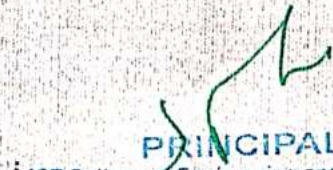

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ABSTRACT

Soy milk is a plant based non dairy beverage produced by soaking and grinding soy seeds, boiling the mixture, filtering out remaining particulates. It is a stable emulsion of oil, water and protein. Soy milk offers culinary diversity, creamy texture and a healthful nutritional profile, including essential omega-3 fatty acids [if fortified] and flavanoids that exert anti oxidant properties. Fructo oligosaccharides are composed of short fructose chains. They are a type of carbohydrate called oligosaccharides. These are subtly sweet and low calorie. These are prebiotic compound, because they are not digestible, FOS travels intact through the small intestine, to the colon, where they support the growth of healthy bacteria in the digestive tract. The objective of the project is to develop a prebiotic soy milk blended milk curd and to find the nutritional composition of the product. The project is carried out by using various types of milk at various composition to find the best feasible product.

Keywords: *Culinary diversity, Emulsion, Flavanoids, Fructo oligosaccharides, Prebiotic,*




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**DEVELOPMENT OF READY TO DRINK (RTD) JUICE
POWDER
FROM RIPE PALMYRA FRUIT (*Borassus flabellifer*)**

PROJECT REPORT

Submitted by

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MUHAMMED RAMEEZ	720918218031
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**BACHELOR OF TECHNOLOGY
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Certified that this Thesis titled "DEVELOPMENT OF READY TO DRINK (RTD) JUICE POWDER FROM RIPE PALMYRA FRUIT (*Borassus flabellifer*) " is the bonafide work of "MUHAMMED AJMAL N P (720918218030), SHAHID AC (720918218040), MUHAMMED RAMEEZ (720918218031), VAJIHE SAHLE MOHAMMED(720918218051), SAMIR KAMAL (720918218039)" who carried out the work under my supervision.

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Dr G.Gnanavel

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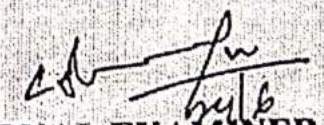
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INTERNAL EXAMINER




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ABSTRACT

Palm is a seasonal fruit and has high nutritional and medicinal values. The palm juice is popular for its taste and high nutritive value. When ripe, the pulp becomes fibrous making the manual and mechanical juice extraction difficult. Due to this, the palm pulp is under-utilized and it is estimated that approximately 10,000 tons of fruit pulp are wasted each year. Unfortunately, Over 60% of the annual fruit yield of the ripe palmyra fruit is lost within 10 days after harvesting due to its high moisture content, resulting in a short shelf- life and limited commercial use. Over the past few years, utilization of palmyra pulp has been inefficient. It is used as a fertilizer, fodder, feedstock for biorefineries and animal feed. Even though palmyrah is an economically important fruit for its nutritional aspects, it has not received proper attention from the agricultural research workers. In this context, knowing the nutritional and physico-chemical properties of palmyra pulp and development of new products and popularizing the same is essential.

Keywords: *Ripe Palmyra Fruit, Juice Powder, Palmyra Pulp, Ready to drink, waste utilization*




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JAMAICAN CHERRY INFUSED COOKIES



A PROJECT REPORT

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TAMIL BHARATHI.S.N	720918218049
RANJITH.V	720918218036

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Certified that this Thesis titled "JAMAICAN CHERRY INFUSED COOKIES" is the bonafide work of "REJWAN ALI A (720918218038), VASANTH ANBU MANI P (720918218052), HARI PRAKASH Y (720918218054), TAMIL BHARATHI S N (720918218049), RANJITH V (720918218036)" who carried out the work under my supervision.

Submitted to the viva-voce examination held on24.6.2022.....


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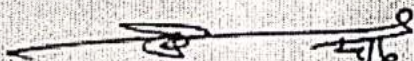

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ABSTRACT

In the world, the consumption of cookies in the last year has increased in countries such as France by 61%, UK 55%, Japan 52% South Africa 48%, Italy 38%, Australia 33%, Mexico and Canada 29%, and the global cookie consumption increased 31.6% during COVID-19 (Cookies Report, 2021). Traditionally, cookies are made with wheat flour which has a high gluten content. Gluten is a mixture of proteins with low nutritional value because in essential amino acids, and gluten has also been linked to celiac disease. Currently, people look for gluten-free products; therefore, various studies have been carried out on the incorporation of new additives in the bakery industry such as cereal fours or starches, to give special favors or structural properties and to replace gluten with proteins of higher nutritional value. Thus, cookies made from the Muntingia calabura meal could be an option to 1) increase knowledge on this fruit known and encourage its cultivation and 2) incorporate it as an ingredient in the bakery industry. Therefore, the objective of this study was the physical characterization of the Muntingia calabura fruit and determination of the physicochemical properties of the meal for use in making cookies and the physicochemical and sensory characterization of the optimized cookies

Keywords: gluten free product, high protein, commercial purpose.




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DEPARTMENT OF FOOD TECHNOLOGY

ACADEMIC YEAR 2021-2022: INTERNSHIP DETAILS

S.No	ROLL No.	NAME OF THE STUDENT	NAME OF THE COMPANY	DURATIONS
1	20FTL301	GOKUL G	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
2	20FTR001	AARDRA S	Sharingo,Coimbatore	7/6/2022-18/6/2022
3	20FTR002	ABHINAV SOMAN	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
4	20FTR003	AHALYA D	Sharingo,Coimbatore	7/6/2022-18/6/2022
5	20FTR004	AIWARYA R	Sharingo,Coimbatore	3/5/2022-14/5/2022
6	20FTR005	ALWIN IGNATIUS T	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
7	20FTR006	ANEENA ANTONY .C	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
8	20FTR007	ARJUN ASHOK	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
9	20FTR008	ARSHIDHA P S	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
10	20FTR009	ASHIQUE SAKKEER	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
11	20FTR010	BALAJI M	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
12	20FTR011	BLESIA BABU	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
13	20FTR012	DHIYOOF YUSRIN	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
14	20FTR013	DINESH K	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
15	20FTR015	FATHIMATHU SWALIHA K A	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
16	20FTR016	HARINI M J	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
17	20FTR017	HARIPRASAD P S	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
18	20FTR018	HIBA PARVEEN K S	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
19	20FTR019	H SHRIN SELFKA	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
20	20FTR020	ISHWARYARAI R	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
21	20FTR021	JITHIN JASIN	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
22	20FTR022	JUMANA HAZEEN M A	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
23	20FTR023	KISHORE P	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
24	20FTR024	MANIVASU V	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
25	20FTR026	MUHAMMED NIHAL	Senthil Papain,Coimbatore	17/5/2022-28/5/2022
26	20FTR027	MOHAMMED SAFAVAN V.P	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
27	20FTR028	MOHAMMED SAHAD V P	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
28	20FTR029	MUHAMMED SHASIL N S	Senthil Papain,Coimbatore	17/5/2022-28/5/2022
29	20FTR030	MOHSIN T V	Senthil Papain,Coimbatore	17/5/2022-28/5/2022
30	20FTR031	NAVANITHA M	Senthil Papain,Coimbatore	17/5/2022-28/5/2022
31	20FTR032	NIDA FATHIMA A M	Senthil Papain,Coimbatore	17/5/2022-28/5/2022
32	20FTR033	NITHISH KUMAR P	Senthil Papain,Coimbatore	17/5/2022-28/5/2022
33	20FTR034	PRASIKA S	Senthil Papain,Coimbatore	17/5/2022-28/5/2022
34	20FTR035	PRAVEEN A	SRM Agro Foods,Namakkal	3/5/2022-14/5/2022
35	20FTR036	PRAVEEN S	SRM Agro Foods,Namakkal	3/5/2022-14/5/2022
36	20FTR037	RAHUL C R	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
37	20FTR038	ROSHNI DEEPAN K	Senthil Papain,Coimbatore	7/6/2022-18/6/2022
38	20FTR039	SAFAR ALI	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
39	20FTR040	SANDHIYA V	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
40	20FTR041	SANJAY KUMAR	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
41	20FTR042	SANTHA MOORTHY S	Sharingo,Coimbatore	17/5/2022-28/5/2022
42	20FTR043	SATHIYASEELAN M	Sharingo,Coimbatore	7/6/2022-18/6/2022
43	20FTR045	SHAHANAS M	Senthil Papain,Coimbatore	7/6/2022-18/6/2022
44	20FTR046	SHIHANA H	Senthil Papain,Coimbatore	7/6/2022-18/6/2022

45	20FTR047	SHILPA K	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
46	20FTR048	SURIYA NARAYANAN S	Sharingo,Coimbatore	3/5/2022-14/5/2022
47	20FTR049	THEJAS S	Sharingo,Coimbatore	3/5/2022-14/5/2022
48	20FTR050	VARSHA.D	Senthil Papain,Coimbatore	17/5/2022-28/5/2022

S.No	ROLL No.	NAME OF THE STUDENT	NAME OF THE COMPANY	DURATIONS
1	18FTR001	ABARNA KARTHEESWARI.V	Sharingo,Coimbatore	3/5/2022-14/5/2022
2	18FTR002	ABINAYA M	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
3	18FTR003	AISWARYA P ANIL	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
4	18FTR004	ALWIN.A	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
5	18FTR005	AMUTHA.A	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
6	18FTR006	ANAND VINAYAK P	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
7	18FTR007	ARUNDHATHY SHABU	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
8	18FTR008	ARYA.K.S	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
9	18FTR009	ASMA SHIRIN.M.S	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
10	18FTR010	BALASUBRAHMANYAM.V	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
11	18FTR011	BALASUBRAMANI.V	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
12	18FTR012	BHARATHAN S	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
13	18FTR013	BINET M VARGHEESE	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
14	18FTR014	DHILIPKUMAR.M	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
15	18FTR015	DURGA DHARSHINI D	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
16	18FTR016	GOKULRAJ K S	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
17	18FTR017	HARIKRISHNAN J	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
18	18FTR018	HRITHWIK KRISHNA.P	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
19	18FTR019	ISMAIL.T	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
20	18FTR020	JEMIN JAMES	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
21	18FTR021	JIDHIN.R	Senthil Papain,Coimbatore	17/5/2022-28/5/2022
22	18FTR022	JOHNESHA CHRISTY M	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
23	18FTR023	JOYAL GEORGE	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
24	18FTR024	KALAIMANI.P	Senthil Papain,Coimbatore	17/5/2022-28/5/2022
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27	18FTR027	MANIKANDAN J	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
28	18FTR028	MELJO PAUL	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
29	18FTR029	MITHUNA K	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
30	18FTR030	MUHAMMED AJMAL N P	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
31	18FTR031	MUHAMMED RAMEEZ	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
32	18FTR033	PRAVIN KUMAR K	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
33	18FTR034	PREETHISVAR.G	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
34	18FTR035	RAGAVENTHIRA V	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
35	18FTR036	RANJITH V	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
36	18FTR037	REEMA THASHEEM	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
37	18FTR038	REJWAN ALI A	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
38	18FTR039	SAMIR KAMAL	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
39	18FTR040	SHAHID A C	Senthil Papain,Coimbatore	7/6/2022-18/6/2022
40	18FTR041	SHINAZ MAHABOOB	Senthil Papain,Coimbatore	7/6/2022-18/6/2022
41	18FTR042	SHIRLEY.D	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
42	18FTR043	SILJO JOSEPH	Sharingo,Coimbatore	3/5/2022-14/5/2022

43	18FTR044	SNEHA VASUDEVAN NAIR	Sharingo,Coimbatore	3/5/2022-14/5/2022
44	18FTR045	SOORAJ B	Senthil Papain,Coimbatore	17/5/2022-28/5/2022
45	18FTR046	SOUNDHARA PANDIYAN.R	Sharingo,Coimbatore	3/5/2022-14/5/2022
46	18FTR047	SURUTHI B	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
47	18FTR048	SWETHA DEBORAH J	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
48	18FTR049	TAMILBHARATHI S N	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
49	18FTR050	VAISHNAVI K N	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
50	18FTR051	VAJIHE SAHLE MOHAMMED	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
51	18FTR052	VASANTH ANBUMANI P	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
52	18FTR054	HARI PRAKASH.Y	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
53	19FTT001	NADEEMSHA N V	Moon Foods,Tiruchengode	3/5/2022-14/5/2022

S.No	ROLL No.	NAME OF THE STUDENT	NAME OF THE COMPANY	DURATIONS
1	19FTR001	AADHITHYA KRISHNAN P	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
2	19FTR002	ABHISHEK SILVAN	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
3	19FTR003	ABIMANYU.B	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
4	19FTR004	ABITHA RAJ R K	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
5	19FTR005	AKHILA KURIAN	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
6	19FTR006	AKILA.K	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
7	19FTR007	ALISHA MOHAMED	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
8	19FTR008	ARSHAD.K	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
9	19FTR009	ARUNACHALAM R	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
10	19FTR011	BABISHA.M	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
11	19FTR012	BHARATH D	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
12	19FTR013	BHARATHI B	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
13	19FTR014	BINLIT P BIJU	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
14	19FTR016	DHANUSH T B	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
15	19FTR017	DHARUN J	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
16	19FTR018	EBIN DAVIS	Senthil Papain,Coimbatore	17/5/2022-28/5/2022
17	19FTR019	EDWIN SABU	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
18	19FTR020	JAGADESH S	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
19	19FTR021	KRISHNANJALI	Senthil Papain,Coimbatore	17/5/2022-28/5/2022
20	19FTR022	MANIKANDAN T	Senthil Papain,Coimbatore	17/5/2022-28/5/2022
21	19FTR023	MIRVIN RASHA V	Sharingo,Coimbatore	3/5/2022-14/5/2022
22	19FTR024	MOHAMMED BADHUSHA K N	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
23	19FTR025	MOHAMMED THOUFIQ.A	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
24	19FTR026	MUHAMMED RABY M	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
25	19FTR027	MUNEEB PARAPPURATH	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
26	19FTR028	NAJA BEEGAM M N	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
27	19FTR029	NITHISHKUMAR S M	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
28	19FTR030	PARVEZ AHAMED S	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
29	19FTR031	POOJA PURUSHOTHAMAN	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
30	19FTR032	ROHAN JENNER M	Moon Foods,Tiruchengode	3/5/2022-14/5/2022
31	19FTR033	SANDHOSH S	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
32	19FTR035	SANTHOSH K	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
33	19FTR036	SETTU G	Senthil Papain,Coimbatore	7/6/2022-18/6/2022
34	19FTR037	SHAFNA K P	Senthil Papain,Coimbatore	7/6/2022-18/6/2022
35	19FTR038	SHARON KURUVILLA	Senthil Papain,Coimbatore	3/5/2022-14/5/2022
36	19FTR039	SINSIA THASLIN S	Sharingo,Coimbatore	3/5/2022-14/5/2022

37	19FTR040	SOWMIYA P	Sharingo,Coimbatore	3/5/2022-14/5/2022
38	19FTR041	SREELAKSHMI A	Senthil Papain,Coimbatore	17/5/2022-28/5/2022
39	19FTR042	SREENEDHI.C	Sharingo,Coimbatore	3/5/2022-14/5/2022
40	19FTR044	SURYA.K.S	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
41	19FTR045	SWEEKA THERESA M ANIL	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
42	19FTR046	TONISHA S	ABC Fruits & Foods,Palakad	7/6/2022-18/6/2022
43	19FTR047	TONY SAJI	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
44	19FTR048	VIDHYA.D	ABC Fruits & Foods,Palakad	3/5/2022-14/5/2022
45	19FTR049	VIPIN DINESH M	Moon Foods,Tiruchengode	3/5/2022-14/5/2022




PRINCIPAL
 JCT College of Engineering and Technology
 PICHANUR COIMBATORE - 641 105



Date: 28-04-2022

To,
The Manager
Senthil Papain and Food Products (P) Limited,
Coimbatore

Dear Madam,

Sub: Internship opportunity -Reg.

Greetings from JCT College of Engineering and Technology!

I would like to seek your kind patronage in providing internship opportunity to our Food Technology students. It will be a great exposure for them to gain industrial and hands on experience.

We request you to kindly share the availability schedule at an early date

Thanking you,



With regards,



Dr. S. MANOHARAN, M.E., Ph.D., FIE
Principal
JCT College of Engineering & Technology
Coimbatore - 641 105.

JCT College of Engineering and Technology

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai)

Accredited by NAAC & Accredited by NBA for Petrochemical, Mechanical, EEE & CSE.)

Pichanur, Coimbatore - 641 105 Tamil Nadu INDIA Phone: +91 422 2636900 Fax: +91 422 2636901 Email: info@jct.ac.in www.jct.ac.in



Senthil Papain and Food Products (P) Limited

SF.No: 395/1/B-2,Veerapanur, Pichanur (PO).,
Coimbatore, Tamilnadu, India - 641105.

INTERNSHIP ACCEPTANCE LETTER

We are pleased to give accept your internship request for your Food Technology students. They can join the Internship training in our organization during the period from 3/5/2022-14/5/2022. During the internship they have to follow the rules and regulations of the company.

Thanks & Regards

A handwritten signature in black ink, appearing to read "Ravitharan S".

Manager

A handwritten signature in blue ink, appearing to be a stylized "S" or "J" followed by a flourish.

PRINCIPAL
JCT College of Engineering and Technology
PICHANUR COIMBATORE - 641 105



Senthil Papain and Food Products (P) Limited

SF.No: 395/1/B-2,Veerapanur, Pichanur (PO).,
Coimbatore, Tamilnadu, India - 641105.

INTERNSHIP CERTIFICATE

This is to certify that **ISHWARYARAI R, B.Tech: Food Technology** student from
JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore has undergone
Internship training in our organization during the period from 3/5/2022-14/5/2022

Thanks & Regards

A handwritten signature in black ink, appearing to read "Ravitharan S".

Manager

A handwritten signature in blue ink, appearing to read "S. S. S.". Below the signature is the word "PRINCIPAL" in blue capital letters. Below that is the text "JCT College of Engineering and Technology" and "PICHANUR COIMBATORE - 641 105" in blue capital letters.

PRINCIPAL
JCT College of Engineering and Technology
PICHANUR COIMBATORE - 641 105



Senthil Papain and Food Products (P) Limited

SF.No: 395/1/B-2,Veerapanur, Pichanur (PO).,
Coimbatore, Tamilnadu, India - 641105.

INTERNSHIP CERTIFICATE

This is to certify that **GOKUL G , B.Tech: Food Technology** student from
JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore has undergone
Internship training in our organization during the period from 3/5/2022-14/5/2022

Thanks & Regards

Ravitharan S

Manager



[Signature]
PRINCIPAL
JCT College of Engineering and Technology
PICHANUR COIMBATORE - 641 105



Date: 12-04-2022

To,
The Manager
Moon Foods,
Tiruchengode,
Namakkal (DT)

Dear Sir,

Sub: Internship opportunity -Reg.

Greetings from JCT College of Engineering and Technology!

I would like to seek your kind patronage in providing internship opportunity to our Biotechnology and Biochemical Engineering students. It will be a great exposure for them to gain industrial and hands on experience.

We request you to kindly share the availability schedule at an early date

Thanking you,



PRINCIPAL
JCT College of Engineering and Technology
PICHANUR COIMBATORE - 641 105

With regards,

Dr. S. MANOHARAN, M.E., Ph.D., FIE
Principal
JCT College of Engineering & Technology
Coimbatore - 641 105.


JCT College of Engineering and Technology
(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai)
Accredited by NAAC & Accredited by NBA for Petrochemical, Mechanical, EEE & CSE.)
Pichanur, Coimbatore - 641 105 Tamil Nadu INDIA Phone: +91 422 2636900 Fax: +91 422 2636901 Email: info@jct.ac.in www.jct.ac.in

MOON FOODS

No :155, Kollapati, Animoor Post, Thiruchnegodu , Namakkal,
Tamil Nadu, India – 637 214.
+91 9841735273 / 9710454060 moonfoods.av@gmail.com



INTERNSHIP ACCEPTANCE LETTER

We are pleased to give accept your internship request for your Food Technology students. They can join the Internship training in our organization during the period from 3/5/2022-14/5/2022. During the internship they have to follow the rules and regulations of the company.

Thanks & Regards

Manager




PRINCIPAL
JCT College of Engineering and Technology
PICHANUR COIMBATORE - 641 105

MOON FOODS

No :155, Kollapati, Animoor Post, Thiruchnegodu , Namakkal,
Tamil Nadu, India – 637 214.
+91 9841735273 / 9710454060 moonfoods.av@gmail.com



INTERNSHIP CERTIFICATE

This is to certify that **DINESH K , B.Tech: Food Technology** student from
JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore has undergone
Internship training in our organization during the period from 3/5/2022-14/5/2022

Thank you

With Regards

A handwritten signature in black ink, appearing to be "S. K.", written over a horizontal line.

Technical Director




PRINCIPAL
JCT College of Engineering and Technology
PICHANUR COIMBATORE - 641 105

MOON FOODS

No :155, Kollapati, Animoor Post, Thiruchnegodu , Namakkal,
Tamil Nadu, India – 637 214.
+91 9841735273 / 9710454060 moonfoods.av@gmail.com



INTERNSHIP CERTIFICATE

This is to certify that **BALAJI K, B.Tech: Food Technology** student from
JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore has undergone
Internship training in our organization during the period from 3/5/2022-14/5/2022

Thank you

With Regards

A handwritten signature in black ink, appearing to be "S. Kumar", written over a horizontal line.

Technical Director



A handwritten signature in green ink, appearing to be "S. Kumar", written over the word "PRINCIPAL".
PRINCIPAL
JCT College of Engineering and Technology
PICHANUR COIMBATORE - 641 105



Date: 02-05-2022

To,
The Managing Head
Shringo ,
Cpimbatore

Dear Sir,

Sub: Internship opportunity -Reg.

Greetings from JCT College of Engineering and Technology!

I would like to seek your kind patronage in providing internship opportunity to our Biotechnology and Biochemical Engineering students. It will be a great exposure for them to gain industrial and hands on experience.

We request you to kindly share the availability schedule at an early date

Thanking you,



With regards,

Dr. S. MANOHARAN, M.E., Ph.D., FIE
Principal
JCT College of Engineering & Technology
Coimbatore - 641 105.



JCT College of Engineering and Technology

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Accredited by NAAC & Accredited by NBA for Petrochemical, Mechanical, EEE & CSE.)

Pichanur, Coimbatore - 641 105 Tamil Nadu INDIA Phone: +91 422 2636900 Fax: +91 422 2636901 Email: info@jct.ac.in www.jct.ac.in



INTERNSHIP ACCEPTANCE LETTER

We are pleased to give accept your internship request for your Food Technology students. They can join the Internship training in our organization during the period from 17/5/2022-28/5/2022. During the internship they have to follow the rules and regulations of the company.

Regards

Managing Head



PRINCIPAL
JCT College of Engineering and Technology
PICHANUR COIMBATORE - 641 105



INTERNSHIP ACCEPTANCE LETTER

This is to certify that , **AHALYA D B.Tech: Food Technology** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from 17/5/2022-28/5/2022

Regards

Managing Head



PRINCIPAL
JCT College of Engineering and Technology
PICHANUR COIMBATORE - 641 105



INTERNSHIP ACCEPTANCE LETTER

This is to certify that , **AISWARYA R , B.Tech: Food Technology** student from
JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore has undergone
Internship training in our organization during the period from 17/5/2022-28/5/2022

Regards

Managing Head



PRINCIPAL
JCT College of Engineering and Technology
PICHANUR COIMBATORE - 641 105



Date: 02-05-2022

To,
The Manager
ABC Food and Fruits ,
Palakkad.

Dear Sir,

Sub: Internship opportunity -Reg.

Greetings from JCT College of Engineering and Technology!

I would like to seek your kind patronage in providing internship opportunity to our Biotechnology and Biochemical Engineering students. It will be a great exposure for them to gain industrial and hands on experience.

We request you to kindly share the availability schedule at an early date

Thanking you,



With regards,

Dr. S. MANOHARAN, M.E., Ph.D., FIE
Principal
JCT College of Engineering & Technology
Coimbatore - 641 105.



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Pichanur, Coimbatore - 641 105 Tamil Nadu INDIA Phone: +91 422 2636900 Fax: +91 422 2636901 Email: info@jct.ac.in www.jct.ac.in



ABC FOOD & FRUITS

Walayar (PO), Palakkad, Kerala

INTERNSHIP ACCEPTANCE LETTER

We are pleased to give accept your internship request for your Food Technology students. They can join the Internship training in our organization during the period from 17/5/2022-28/5/2022. During the internship they have to follow the rules and regulations of the company.

Yours

Manager



PRINCIPAL
JCT College of Engineering and Technology
PICHANUR COIMBATORE - 641 105



ABC FOOD & FRUITS

Walayar (PO), Palakkad, Kerala

INTERNSHIP

This is to certify that , **ANEENA ANTONY B.Tech: Food Technology** student from
JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore has undergone
Internship training in our organization during the period from 17/05//2022-28/05/2022

Yours

Manager



PRINCIPAL
JCT College of Engineering and Technology
PICHANUR COIMBATORE - 641 105



ABC FOOD & FRUITS

Walayar (PO), Palakkad, Kerala

INTERNSHIP

This is to certify that , **ARSHIDHA P S, B.Tech: Food Technology** student from
JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore has undergone
Internship training in our organization during the period from 17/05//2022-28/05/2022

Yours

Manager



PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105



Date: 02-06-2022

To,
The Manager
SRM Agro Foods,
Namakkal

Dear Sir,

Sub: Internship opportunity -Reg.

Greetings from JCT College of Engineering and Technology!

I would like to seek your kind patronage in providing internship opportunity to our Biotechnology and Biochemical Engineering students. It will be a great exposure for them to gain industrial and hands on experience.

We request you to kindly share the availability schedule at an early date

Thanking you,




PRINCIPAL
JCT College of Engineering and Technology
PICHANUR COIMBATORE - 641 105

With regards,




Dr. S. MANOHARAN, M.E., Ph.D., FIE
Principal
JCT College of Engineering & Technology
Coimbatore - 641 105.

JCT College of Engineering and Technology

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SRM AGRO FOODS

Paramathi, Namakkal

INTERNSHIP ACCEPTANCE LETTER

We are pleased to give accept your internship request for your Food Technology students. They can join the Internship training in our organization during the period from 7/6/2022-18/6/2022. During the internship they have to follow the rules and regulations of the company.

Yours

Manager



PRINCIPAL
JCT College of Engineering and Technology
PICHANUR COIMBATORE - 641 105



SRM AGRO FOODS

Paramathi, Namakkal

INTERNSHIP

This is to certify that , **PRAVEEN S , B.Tech: Food Technology** student from
JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore has undergone
Internship training in our organization during the period from **7/6//2022-18/6/2022**.

Yours

Manager



PRINCIPAL
JCT College of Engineering and Technology
PICHANUR COIMBATORE - 641 105



SRM AGRO FOODS

Paramathi, Namakkal

INTERNSHIP

This is to certify that , **PRAVEEN A , B.Tech: Food Technology** student from
JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore has undergone
Internship training in our organization during the period from **7/6//2022-18/6/2022**.

Yours

Manager



PRINCIPAL
JCT College of Engineering and Technology
PICHANUR COIMBATORE - 641 105

JCT**JCT COLLEGE OF ENGINEERING AND TECHNOLOGY**

PICHANUR, COIMBATORE - 641105
DEPARTMENT OF PETROCHEMICAL
ENGINEERING

Si.No	Enrolment Number	Name of the Students	Company/Enterprises	Location	Duration	Category
1	720919139001	AADHITHYAN.S	SRILUCK PAINTS	DHARMAPURI	15-08-2021 to 15-09-2021	INTERNSHIP
2	720919139002	ABHAY KRISHNA P S				
3	720919139003	ABINATH T				
4	720919139004	ABIRAM K				
5	720919139005	ADITHYA RAJ				
6	720919139006	AISWARYA ANIL				
7	720919139007	AKASH N				
8	720919139008	ANTO AJEES RAJA X				
9	720919139010	ARUNKUMAR S	THE KERALA MINERALS AND METALS LTD	SANKARAMANGALAM, CHAVARA, KERALA	10-09-2021 to 5-10-2021	
10	720919139011	ARUNSELVIN T				
11	720919139012	ASHISH K K				
12	720919139013	ASHISH M A				
13	720919139014	ASIF MUSHEER M J				
14	720919139015	ASWIN M S				
15	720919139016	ATHISH G R				
16	720919139017	ATHUL KRISHNA P A				
17	720919139018	BAVYA BABU	INSTITUTE OF INNOVATION	TIRUVANNAMALAI	10-11-20 to 20-11-20	
18	720919139019	BHARATH.S.A				
19	720919139020	BLESSWIN PAUL BIN.B				
20	720919139021	DHANASEKARAN S				
21	720919139022	DIWAHAR.M				
22	720919139023	ENEN KARUNAN				
23	720919139024	ESHWAR A				
24	720919139025	GOKUL PRASATH S				
25	720919139026	GOLDEN RENNY P	THE INSTITUTIONS OF ENGINEERS	TIRUVALLUR	1-06-21 to 15-06-21	
26	720919139027	HARIHARAN R				



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JCT College of Engineering and Technology

**PRINCIPAL**

JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

27	720919139029	T HUDSON			21
28	720919139030	JEEVA R			
29	720919139031	KAMALAKANNAN.G			
30	720919139032	MAHESH KANNAN.M			
31	720919139033	MATHESWAR V			
32	720919139034	MAYUR MANGESH GHATKAR M			
33	720919139036	MOHAMED HALIDH.U	CIPET:INSTITUTE OF PETROCHEMICALS TECHNOLOGY	CHENNAI	19-04- 2021 to 20-04- 2021
34	720919139037	MOHAMMED ALTHAF A			
35	720919139044	PRITHVIN DEVASSY			
36	720919139303	FAYAS .R			
37	720919139306	RAHUL			
38	720919139308	RANGANATHAN.K.S			
39	720919139310	SIDHARTHAN .R			
40	720919139312	SUJITH KARUNAKARAN			
41	720919139501	MANOJ KUMAR	MANALI PETROCHEMICALS LIMITED	CHENNAI	06-12-21 to 20-12- 21
42	720919139035	MOHAMED AYISH.A.A			
43	720919139039	NANDHA KUMAR.J			
44	720919139040	NITHISHWARAN.V			
45	720919139041	PRANAV T			
46	720919139042	PRASANTH S			
47	720919139043	PRAVEEN KUMAR.K			
48	720919139045	RAAJKAMAL BORBORA			
49	720919139046	RAHUL R	TRAVANCORE CEMENTS	KERALA	13.1.20- 18.01.20
50	720919139047	RAJA KABILESH.R			
52	720919139049	ROSHIN DANNISH.R			
53	720919139050	SAMPANTHAM.G			
54	720919139051	S. SARATH			
55	720919139052	SARAVANAN P			
56	720919139053	SASIKUMAR.M			
57	720919139054	SATHYANARAYANAN			



PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

		K			
58	720919139055	SELVABHARATHI M			
59	720919139048	RESHMA L A			
59	720919139056	SHARAFARAS T K			
60	720919139057	SHERON VARGHESE			
61	720919139058	SHERYL J			
62	720919139059	SHREE TULASI.A			
63	720919139060	SRAVAN.S			
64	720919139061	STARVIN.D.V			
65	720919139062	SUBHABHARATHI			
66	720919139063	SUBASH S			
67	720919139064	SUGAN T			
68	720919139065	SUJAID P			
69	720919139066	SUJITH PRASANTH M			
70	720919139067	THANIYARASU.R			
71	720919139068	UMMAR FAROOQ K			
72	720919139069	VEERAPANDIYAN.P			
73	720919139070	VIJAY P			
74	720919139071	ABDULLA HAMZA A			
75	720919139301	ALBIN SMITH .J			
76	720919139302	DELPHINSHAM .R			
77	720919139304	KUPERARAJESH.S			
78	720919139307	RAMESH KUMAR SAHNI			
79	720919139309	RISHABH .R			
80	720919139311	SRINATH.V			
81	720919139313	TEJAVU GOPALA KRISHNA			
82	720919139315	ABHINAV.R			
85	720920139001	AJAY B			
86	720920139002	AJAY T			
87	720920139003	AKASH P R			
88	720920139004	ANANDHU KESAV			
			FACT COCHIN	UDYOGMANDAL	12-04-21 to 25-04-21
			THE KERALA MINERALS AND METALS LTD	SANKARAMANGALAM, CHAVARA, KERALA	18.6.21-24.6.21
			SRILUCK PAINTS	DHARMAPURI	28-09-2021 to 11-10-2021
			SRILUCK PAINTS	DHARMAPURI	5-01-2022 to 20-01-2022



89	720920139005	AROCKIA ARUL CHANDRU S	THE KERALA MINERALS AND METALS LTD	SANKARAMANGALAM, CHAVARA, KERALA	18.7.21-24.7.21
90	720920139006	ARULGNANI K			
91	720920139007	ARULSELVAN S			
92	720920139009	BOOBALAN R			
93	720920139010	CHETLAMALLAPURAM MAMATHA			
94	720920139011	DALVIN R			
95	720920139012	HARIHARAN M			
96	720920139013	JOSHVA JOSEPH			
97	720920139014	KAILAS KRISHNA D	CIPET:INSTITUTE OF PETROCHEMICALS TECHNOLOGY	CHENNAI	23-05-21 to 04-06-21
98	720920139015	MADHESHWARAN K P			
99	720920139016	MANOJ A			
100	720920139017	MUTHU SELVAM M			
101	720920139018	NOOR MOHAMMED J			
102	720920139020	RAMKUMAR R			
103	720920139021	SANJAY SUKESH			
104	720920139022	SANTHOSHKUMAR M			
105	720920139023	SARATH KUMAR T	INSTITUTE OF INNOVATION	TIRUVANNAMALAI	06-12-21 to 20-12-21
106	720920139024	SELVA G			
107	720920139025	SHINILJITH K			
108	720920139026	SUBASH C	MANALI PETROCHEMICALS LIMITED	CHENNAI	12-04-21 to 25-04-21
109	720920139027	SURYA E			
110	720920139029	THAAYAALAN K S			
111	720920139030	VALANARASU V			
112	720920139031	VISHNU M			
113	720920139031	ALEN T S			
114	720920139032	KARTIK S	FACT COCHIN	UDYOGMANDAL	28-09-2021 to 11-10-2021
115	720920139033	RAGAVENDRAN K			
116	720920139035	SALAMON A			
117	720920139036	SANTHOSH S			
118	720920139037	SASIKUMAR R			



Ref: Pers/106/13/2021

December 23, 2021

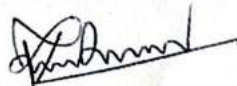
TO WHOMSOEVER IT MAY CONCERN

This is to certify that Prasanth T, B.E Petrochemical Engineering, of JCT College of Engineering and Technology, Coimbatore, has undergone Internship in our company from 06.12.2021 to 20.12.2021.

During the period, he had evinced keen interest in observing the activities of Technical Services Department, and other allied functions therein.

We wish all success in her future endeavors.

for Manali Petrochemicals Limited



RS Prabhakar
Head – Human Resources


PRINCIPAL

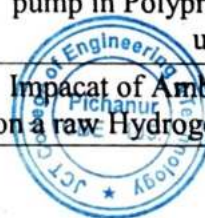
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

Email ID : prabhakar@manalipetro.com

PROJECT BATCH DETAILS 2022

IV Year Petrochemical Engineering

S.No	Register No	Name	Batch No	Project Title	Project Guide
1	720918139001	AAJIN S	1	Methyl Di-ethanol amine process simulation and parameters Optimisation for High-Sulphur gas Sweetening	Mr.M.Ramkumar
2	720918139004	AKASH S			
3	720918139018	ASHWIN RAJ R			
4	720918139044	JOHN BENNET J P			
5	720918139003	AJITH JOSE FRANCIS	2	Phosphorous functionalization of Graphene for Flame Retardancy	Dr.K.Balasubramani
6	720918139007	ALWIN JOSEPH			
7	720918139308	VISHNU MADHAVNAN			
8	720918139010	ANANDHU K S			
9	720918139011	ANANDHU P B	3	Brenzene Hydrogenation process study and Design of Shell and Tube Heat Exchanger used in Benzene Hydrogenation process	Mr.A J. Flavian
10	720918139017	ASHISH V V			
11	720918139028	DASTON DAVID T			
12	720918139030	DIVIN RAJ			
13	720918139008	AMAL O V	4	Modelling and Simulation of Aromatic recovery unit in ASPEN HYSYS and Solvent Flow Optimization for Energy conservation	Ms.V.P.Kalpana
14	720918139013	ANGITH A LAKSHMAN			
15	720918139015	ARJUNRAJ T			
16	720918139020	ASWIN O			
17	720918139016	ARUN KUMAR S	5	Characterization of Heavy crude oil Asphaltene Aggregation problem and suitable solution of Enhanced Oil recovery method	Dr.S.Kavitha
18	720918139039	GOWTHAM K			
19	720918139050	MAJITH ASLIN J			
20	720918139064	NIHITHAN J			
21	720918139006	ALAVI MAJID P K	6	Control of Effluent Treatment Parameters in Caprolactam Plant	Ms.V.P.Kalpana
22	720918139019	ASRAY A			
23	720918139021	BASIL VINOD			
24	720918139306	STEVE THOMAS			
25	720918139012	ANANDUKRISHNAN	7	Energy Maximization using a Heat pump in Polypropylene recovery unit	Mr.A J. Flavian
26	720918139022	BAVA SALMAN M A			
27	720918139068	RABIN MOHAMMED P A			
28	720918139023	BHARATH A	8	Impact of Ambient Temperature on a raw Hydrogen Cooler-Analysis	MR.G.Arumugam
29	720918139066	PETER BABISTAN L			



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62	720918139099	VIPIN.T.P			
63	720918139053	MILIN PHILIP SUNDAR			
64	720918139057	MOHAMMED MIDHLAJ.P.T	18	Removal of Phosphate from Aqueous Effluent of Oxo Alcohol unit	Mr.S.Kirubanandan
65	720918139084	SREEVISHAKH HARIDAS			
66	720918139096	VIJIN VARGHESE			
67	720918139037	GOLDWIN JENISH K S	19	Simulation of Ethanol recovery from fermented sugar cane juice in a Distillation Column using ASPEN HYSYS	Mr.B.Parthiban
68	720918139065	PAVITHRA S			
69	720918139075	SARA S			
70	720918139302	ANTON JOWIN			
71	720918139033	ESAKKI RAJA G	20	Manufacture of Acetaldehyde from Ethylene	Mr.J.Saravanan
72	720918139048	LOGESWARAN D			
73	720918139049	MADHANKUMAR R			
74	720918139070	RAJESHKANNA M			
75	720918139043	JITHIN GEORGE	21	Production of Liquid Biofertilizer using Azotobacter chroococcum	Mr.Saileswaran
76	720918139067	PREM NATH P			
77	720918139303	MADHAN A			
78	720918139501	YADHUKRISHNAN K M			
79	720918139060	MOWLI SAMYUKTHA A A	22	Design and Simulation of Nitrogen Rejection in cryogenic Distillation column by Refluxed Absorber using Aspen Hysys	Ms.B.Athulya
80	720918139073	SAMSON.R			
81	720918139077	SATHISH KUMAR R			
82	720918139307	KALUVA VENKATA MAHENDRA			
83	720918139058	MOHAMMED SHAREEF K	23	Process Simulation of Hydrogen Production by Steam Reforming with CO2 Sequestration using ASPEN HYSYS	Mr.M.Ramkumar
84	720918139074	SANDHARA ROSE SIRIL			
85	720918139081	SHAHUL HAMEED G			
86	720918139082	SHAIJU K S			
87	720918139055	MOHAMED FAYIS.P.V	24	Natural Dyes from Beta Vulgaris and Curcuma longa	Dr.S.Kavitha
88	720918139083	SIBI.M			
89	720918139305	KANULLA SOBHANA VARA PRASAD			
90	720918139701	GEORGE PHILIP DANIELL JOHN EDWARD			
91	720918139089	THIRUPPATHI.R	25	Experimental Investigation of Heat	Mr.T.Zimwan



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30	720918139072	SAHAYA MICHEAL AJAY.M		using HTRI	
31	720918139094	VIBIN.M			
32	720918139024	BHUVANESHWARAN M	9	Thermal performance prediction of Heat pipe with Nanofluids using RSM	MR.G.Arumugam
33	720918139025	CHANDRA MOULI B			
34	720918139038	GOWTHAM K			
35	720918139098	VIMALRAJ C			
36	720918139026	CHANDRU M	10	Syngas production from regasified liquified natural gas and its Modelling using DWSIM	Mr.B.Parthiban
37	720918139027	CHANDRU S			
38	720918139031	DURAIRAJ A			
39	720918139097	VIMAL P			
40	720918139032	ELAMARAN A	11	MANUFACTURE of Formic acid from Methyl formate	Ms.S.Sasiya
41	720918139036	GOGUL NATH R			
42	720918139040	GUNALAN J			
43	720918139046	KARTHIKEYAN C			
44	720918139034	GIDEON P	12	Large Scale Manufacture of Urea and Low Pressure Decomposer analyse	Dr.K.Balasubramani
45	720918139035	GNANA SEKAR I			
46	720918139045	KARAN P			
47	720918139054	MOHAMED FARISH J			
48	720918139069	RAJAGANAPATHY.R	13	Production and Purification of Liquid Fuel from household plastic waste and optimization by Nano Particles	Ms.G.Nimisha
49	720918139071	RITHIKROSHAN R			
50	720918139076	SARAVANAKUMAR G			
51	720918139059	MOHANAPRAKASH.N			
52	720918139061	MUNESWARAN.S	14	Production of Hydrogen from Methane by using Steam methane Reforming Method	Ms.Leya
53	720918139086	SUBARAMA GOKILAN R			
54	720918139087	SUBHA KABILAN.D			
55	720918139056	MOHAMMED FAYAS P S			
56	720918139078	SATHYAPRIYA. S	15	Extracting process of Fuel from Plastic Waste	Ms.S.Sasiya
57	720918139052	MANOJ PRABHAKAR K			
58	720918139095	VIJAYAPRABHAKARAN V			
59	720918139062	MUZZAMMIL BIN HAMEEDULLAH			
60	720918139079	SHAHEEM.A	17	Removal of Hydrogen Sulphide, Mercaptans and spent Caustic, TO improve the Purity of LPG	Ms.Sobiya
61	720918139093	VENKITESH P			



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S.S.

92	720918139091	VENGATESAN S	Transfer studies of Dimple plate Heat Exchanger
93	720918139092	VENGATESH M	
94	720918139301	S AHAMED SHA FAHAD	

P. m
HoD/PCE

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**CHARACTERIZATION OF HEAVY CRUDE OIL
ASPHALTENE AGGREGATION PROBLEM AND
SUITABLE SOLUTION OF ENHANCED OIL RECOVERY
METHOD**

A PROJECT REPORT

Submitted by

ARUN KUMAR S	720918139016
GOWTHAM K	720918139039
MAJITH ASLIN J	720918139050
NIHITHAN J	720918139064

*In partial fulfilment for the award of the Degree
of*

BACHELOR OF ENGINEERING

in

PETROCHEMICAL ENGINEERING

**JCT COLLEGE OF ENGINEERING AND TECHNOLOGY,
COIMBATORE - 641105**



ANNA UNIVERSITY CHENNAI-600 025.

JUNE 2022




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PICHANUR, COIMBATORE - 641 105.

ABSTRACT

The characterization of asphaltenes recovered from different crude oils is reported in the present work. The properties of the crude oils cover a wide range (API gravity: 10–33°, asphaltene content: 1.7–25.1 wt.%). Asphaltenes were precipitated in a high pressure batch reactor using n-heptane as solvent. Metal content by atomic absorption, elemental analysis, UV-fluorescence spectroscopy and molecular weight distribution by size exclusion chromatography were used as characterization techniques. The content of asphaltenic nickel, vanadium and sulfur was calculated for each crude oil. It was found that the concentration of these three species was higher in heavier crude oils. Heavier crudes also showed significantly higher asphaltene contents, which represented important fractions of the vacuum residue produced from these oils. However, the differences in asphaltene molecular weight distributions were narrower and did not show a clear trend as a function of the origin of the sample.

KEYWORDS: Asphaltene aggregation, EOR, Asphaltene, Aggregation, heavy crude oil.



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8. Conclusion

A good correlation between asphaltene content and API gravity of five crude oils was obtained.

The heavier oil samples also showed increasing concentrations of sulfur, which reached levels above 5 wt.%, and trace metals (Ni and V). However, this study on asphaltene samples from five different oils has shown no correlation between asphaltene structure and molecular weight distribution, all samples showing similar molecular weight ranges.

Asphaltene chemical structure was probed by UV-F spectroscopy to determine trends in aromatic cluster sizes.

As in the case of SEC results, all asphaltenes showed similar spectra, except the sample with higher API gravity (10°), which also showed larger polyaromatic ring systems.


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December 23, 2021

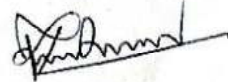
TO WHOMSOEVER IT MAY CONCERN

This is to certify that Prasanth T, B.E Petrochemical Engineering, of JCT College of Engineering and Technology, Coimbatore, has undergone Internship in our company from 06.12.2021 to 20.12.2021.

During the period, he had evinced keen interest in observing the activities of Technical Services Department, and other allied functions therein.

We wish all success in her future endeavors.

for Manali Petrochemicals Limited



RS Prabhakar
Head – Human Resources



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Email ID : prabhakar@manalipetro.com



JCT College of Engineering and Technology

Pichanur Coimbatore-641105
Department of Petroleum Engineering



Sl. No.	Title of the collaborative activity	Name of the collaborating agency with contact details	Name of the participant	Year of collaboration	Duration
1	Internship/In-Plant	SPIC	HARISH KUMAR D	2022	25.07.2022 to 05.08.2022
2	Internship/In-Plant	SPIC	DINESH R	2022	25.07.2022 to 05.08.2022
3	Internship/In-Plant	SPIC	UDAYA SANTHOSH C	2022	25.07.2022 to 05.08.2022
4	Internship/In-Plant	SPIC	KARANRAJ S	2022	25.07.2022 to 05.08.2022
5	Internship/In-Plant	SPIC	UDAYA KISHORE K	2022	08.08.2022 to 19.08.2022
6	Internship/In-Plant	ONGC	DHIYANESH R	2022	09.05.2022 to 23.05.2022
7	Internship/In-Plant	ONGC	ROBIN ANTONY.J	2022	09.05.2022 to 23.05.2022
8	Internship/In-Plant	ONGC	VASIKARAN.V	2022	09.05.2022 to 23.05.2022
9	Internship/In-Plant	ONGC	SAM DANIEL M	2022	09.05.2022 to 23.05.2022
10	Internship/In-Plant	PETROLEUM ENGINEERING ASSOCIATION	POOJA D	2021	15.03.2021 to 04.04.2021

11	Internship/In-Plant	SPIC	POOJA D	2022	08.08.2022 to 19.08.2022
12	Internship/In-Plant	ONGC	ANUSIYA.C	2022	15.02.2022 to 14.03.2022
13	Internship/In-Plant	ONGC	DHIYANESH R	2022	25.07.2022 to 18.08.2022
14	Internship/In-Plant	ONGC	MUKILAN.S	2022	25.07.2022 to 18.08.2022
15	Internship/In-Plant	ONGC	CHIRPYKUMARA N V C	2022	25.07.2022 to 18.08.2022
16	Internship/In-Plant	ONGC	JAGATH RATCHAGAN M	2022	25.07.2022 to 18.08.2022
17	Internship/In-Plant	ONGC	HARI KRISHNA R G	2021	13.12.2021 to 13.01.2022
18	Internship/In-Plant	ONGC	JEEVA NATHIN R	2021	13.12.2021 to 13.01.2022
19	Internship/In-Plant	TAMILNADU PETROCHEMICAL LTD	ARAVINDHAN.R	2021	07.11.2022 to 20.11.2022
20	Internship/In-Plant	TAMILNADU PETROCHEMICAL LTD	JAISON.M	2021	07.11.2022 to 20.11.2022
21	Internship/In-Plant	TAMILNADU PETROCHEMICAL LTD	PRAKASH.P	2021	07.11.2022 to 20.11.2022
22	Internship/In-Plant	TAMILNADU PETROCHEMICAL LTD	VIGNESH R	2021	07.11.2022 2 to 20.11.2022
23	Internship/In-Plant	ONGC,Dehradun	AKSHAY D C	2021	19.07.2021- 18.08.2021
24	Internship/In-Plant	Mangalore Refinery and Petrochemical ltd	AMAL PAUL SHAJU	2021	18.12.2021- 30.12.2021
25	Internship/In-Plant	Learn Vault	AROMAL BIJU	2021	21.06.2021- 04.08.2021
26	Internship/In-Plant	Sriluck Paints	CHANDRU.S	2021	02.08.2021- 03.10.2021
27	Internship/In-Plant	Sriluck Paints	DINESH K	2021	02.08.2021- 03.10.2021
28	Internship/In-Plant	ONGC, Ahmedabad	FAIYAZ.F	2021	06.12.2021- 31.12.2021

29	Internship/In-Plant	Learn Vault	HARIPRASATH.P	2021	21.06.2021-04.08.2021
30	Internship/In-Plant	Mangalore Refinery and Petrochemical ltd	JOESTEEVE S VELIYATH	2021	18.12.2021-30.12.2021
31	Internship/In-Plant	Petroleum Engineers Association	KALEEL AHAMED S	2021	25.10.2021-15.11.2021
32	Internship/In-Plant	Petroleum Engineers Association	MOHAMMED ALI RAZLAN.M	2021	25.10.2021-15.11.2021
33	Internship/In-Plant	Petroleum Engineers Association	MOHAMMED SALMAN.M	2021	25.10.2021-15.11.2021
34	Internship/In-Plant	Oil India Limited, Assam	MOHAMMED SHAHIN SHA Z	2021	10.12.2021-31.12.2021
35	Internship/In-Plant	Petroleum Engineers Association	NAGARJUN.B	2021	25.10.2021-15.11.2021
36	Internship/In-Plant	Sriluck Paints	PRABU M	2021	02.08.2021-03.10.2021
37	Internship/In-Plant	Learn Vault	SANJEEV R	2021	21.06.2021-04.08.2021
38	Internship/In-Plant	Sriluck Paints	SANKAR RAJA E	2021	02.08.2021-03.10.2021
39	Internship/In-Plant	Petroleum Engineers Association	SANTHOSH.J	2021	25.10.2021-15.11.2021
40	Internship/In-Plant	Learn Vault	SANTHOSH KUMAR	2022	21.06.2021-04.08.2021
41	Internship/In-Plant	Learn Vault	SARAN.S	2022	21.06.2021-04.08.2021
42	Internship/In-Plant	Learn Vault	SARATHBABU.S	2022	21.06.2021-04.08.2021
43	Internship/In-Plant	Petroleum Engineers Association	SARAVANAN S	2022	25.10.2021-15.11.2021
44	Internship/In-Plant	Sriluck Paints	SATHISH J	2022	02.08.2021-03.10.2021
45	Internship/In-Plant	Sriluck Paints	SHAJIN JOE J	2022	02.08.2021-03.10.2021
46	Internship/In-Plant	Petroleum Engineers Association	SHANIO.A	2022	25.10.2021-15.11.2021
47	Internship/In-Plant	Oil India Limited, Assam	SHARUN.K	2022	10.12.2021-31.12.2021
48	Internship/In-Plant	Sriluck Paints	SHEIK ABDULLA S	2022	02.08.2021-03.10.2021
49	Internship/In-Plant	Petroleum Engineers Association	SIVANESH.S	2022	25.10.2021-15.11.2021
50	Internship/In-Plant	Petroleum Engineers Association	SRINIVASAN K	2022	25.10.2021-15.11.2021

51	Internship/In-Plant	Petroleum Engineers Association	SURIYA.R	2022	25.10.2021-15.11.2021
52	Internship/In-Plant	Sriluck Paints	THARANESH K	2022	02.08.2021-03.10.2021
53	Internship/In-Plant	Petroleum Engineers Association	THEKSHIN KARTHIK MA S	2022	25.10.2021-15.11.2021
54	Internship/In-Plant	Sriluck Paints	HARI RAJAN.M	2022	02.08.2021-03.10.2021
55	Internship/In-Plant	Petroleum Engineers Association	RONALDO SEBASTION.S	2022	25.10.2021-15.11.2021



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Pichanur Coimbatore-641105
Department of Petroleum Engineering



Programme name	Program Code	List of students undertaking project work/field work/internship	Title of the Project
B.E Petroleum Engineering	PE 8811	Students Name	
		FAIYAZ.F Joesteeve S Veliyath, Amal Paul Shaju Mohammed Shahin Sha	Utilization of smart well completion for production optimization in complex well geometries
		Ronaldo Sebastion.S Kaleel Ahamed S Mohammed Ali Razlan.M Mohammed Salman.M	The lot based design and fabrication of cooling tower for produced water system

		Prabu M Sathish J Sheik Abdulla S Tharanesh K	Water flooding for pressure maintenance and improve recovery
		Nagarjun.B Sankar Raja E Suriya.R Shajin Joe J	IOT Based Liquefied Petroleum Gas leakage detector
		Sijin.S.R Aromal Biju Saran.S Sarathbabu.S	Petro physics lab studies on convention core
		Anuraj.K K Sharun.K Wafa Mohammed	Unusual situation in well killing
		Chandru.S Dinesh K	Lost circulation techniques and fishing operation
		Hari Rajan.M Balamurali N	Well control practices and commonly encountered Down hole completion

		Shanio.A	
		Shahul Hameed.S Santhosh Kumar Santhosh.J Sivanesh.S	Effect of organic ash and wheat stalk on oil well cementing properties
		Arunkumar.A Saravanan S Hariprasath.P Sanjeev R	Effect of different raw materials on rheological properties special lost circulation of water based mud.
		Akshay D C	Study on managed Pressure Drilling Technique and its application in HOHT and ERO Wells
		Srinivasan K Thekshin Karthik Ma S	Well intervention using coil tubing and liquid Nitrogen

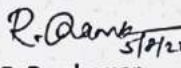
Date: 05.08.2022

CERTIFICATE

This is to certify that Harish kumar D, studying Second year B.Tech Petroleum Engineering , student of JCT College Of Engineering and Technology,Coimbatore has undergone Internship Training in M/s. Southern Petrochemical Industries Corporation Ltd SPIC Nagar, Tuticorin.

Internship Training details are as furnished below:

1) Type of Training Imparted	INTERNSHIP TRAINING
2) Period of Institutional Training	25.07.2022 to 05.08.2022
3) Allotment of Department	ALF3 & SSP PLANT
4) Conduct & Character	GOOD
5) Performance during Training	GOOD
6) Attendance during Training	REGULAR


R. Ramkumar
Joint Manager – Training & Development



Southern Petrochemical Industries Corporation Limited

(CIN: L11101TN1969PLC005778)

Factory: SPIC Nagar, Muthiahpuram Post, Tuticorin 628 005 Tamilnadu, India.

Phone : +91 (0461) 2355401 | Email : spiccorp@spic.co.in | www.spic.in

Date: 05.08.2022

CERTIFICATE

This is to certify that Dinesh R, studying Second year B.Tech Petroleum Engineering , student of JCT College Of Engineering and Technology,Colmbatore has undergone Internship Training In M/s. Southern Petrochemical Industries Corporation Ltd SPIC Nagar, Tuticorin.

Internship Training details are as furnished below:

1) Type of Training Imparted	INTERNSHIP TRAINING
2) Period of Institutional Training	25.07.2022 to 05.08.2022
3) Allotment of Department	DAP PLANT
4) Conduct & Character	GOOD
5) Performance during Training	GOOD
6) Attendance during Training	REGULAR


5/8/22

R. Ramkumar
Joint Manager – Training & Development



Southern Petrochemical Industries Corporation Limited

(CIN: L11101TN1969PLC005778)

Factory: SPIC Nagar, Muthiahpuram Post, Tuticorin 628 005 Tamilnadu, India.

Phone : +91 (0461) 2355401 | Email : spiccorp@spic.co.in | www.spic.in

Date: 05.08.2022

CERTIFICATE

This is to certify that Udaya santhosh C, studying Second year B.Tech Petroleum Engineering , student of JCT College Of Engineering and Technology, Coimbatore has undergone Internship Training in M/s. Southern Petrochemical Industries Corporation Ltd SPIC Nagar, Tuticorin.

Internship Training details are as furnished below:

1) Type of Training Imparted	INTERNSHIP TRAINING
2) Period of Institutional Training	25.07.2022 to 05.08.2022
3) Allotment of Department	DAP PLANT
4) Conduct & Character	GOOD
5) Performance during Training	GOOD
6) Attendance during Training	REGULAR

R. Ramkumar
5/8/22

R. Ramkumar

Joint Manager – Training & Development



Southern Petrochemical Industries Corporation Limited

(CIN: L11101TN1969PLC005778)

Factory: SPIC Nagar, Muthiahpuram Post, Tuticorin 628 005 Tamilnadu, India.

Phone : +91 (0461) 2355401 | Email : spiccorp@spic.co.in | www.spic.in

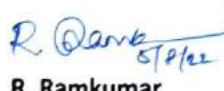
Date: 05.08.2022

CERTIFICATE

This is to certify that Karanraj S, studying Second year B.Tech Petroleum Engineering , student of JCT College Of Engineering and Technology,Coimbatore has undergone Internship Training in M/s. Southern Petrochemical Industries Corporation Ltd SPIC Nagar, Tuticorin.

Internship Training details are as furnished below:

1) Type of Training Imparted	INTERNSHIP TRAINING
2) Period of Institutional Training	25.07.2022 to 05.08.2022
3) Allotment of Department	ALF3 & SSP PLANT
4) Conduct & Character	GOOD
5) Performance during Training	GOOD
6) Attendance during Training	REGULAR


R. Ramkumar
Joint Manager – Training & Development



Southern Petrochemical Industries Corporation Limited

(CIN: L11101TN1969PLC005778)

Factory: SPIC Nagar, Muthiahpuram Post, Tuticorin 628 005 Tamilnadu, India.

Phone : +91 (0461) 2355401 | Email : spiccorp@spic.co.in | www.spic.in

Date: 19.08.2022

CERTIFICATE

This is to certify that Udaya kishore K, studying Third year B.Tech Petroleum Engineering , of JCT College Of Engineering and Technology,Coimbatore has undergone Internship Training in M/s. Southern Petrochemical Industries Corporation Ltd SPIC Nagar, Tuticorin.

Internship Training details are as furnished below:

1) Type of Training Imparted	INTERNSHIP TRAINING
2) Period of Institutional Training	08.08.2022 to 19.08.2022
3) Allotment of Department	AMMONIA PLANT
4) Conduct & Character	GOOD
5) Performance during Training	GOOD
6) Attendance during Training	REGULAR

R. Ramkumar
19/8/22

R. Ramkumar
Joint Manager – Training & Development



Southern Petrochemical Industries Corporation Limited
(CIN: L11101TN1969PLC005778)

Factory: SPIC Nagar, Muthiahpuram Post, Tuticorin 628 005 Tamilnadu, India.
Phone : +91 (0461) 2355401 | Email : spiccorp@spic.co.in | www.spic.in



OIL AND NATURAL GAS CORPORATION LIMITED

Skill Development Centre, Chennai

CERTIFICATE

*This is to certify that Mr. R. Dhiyanesh
3rd Year student of B.Tech Petroleum Engineering*

JCT College of Engineering, Coimbatore

*has undergone Student's Internship Training in ONGC, Chennai
from 25th July 2022 to 18th August 2022, under the guidance of
Petroleum Engineering Experts of ONGC, Chennai*

*He has successfully completed the Training on
'Study of Petroleum Engineering in ONGC'*

We wish all success in the academic endeavors and life.

Certificate No. ONGC/SDC/CH/B.Tech/S/2022-23

Place: Chennai

Date: 22 August 2022.

S. Ravichandran

Chief General Manager (D)

Head Skill Development Centre



OIL AND NATURAL GAS CORPORATION LIMITED

CAUVERY ASSET - HR/ER - IR
NERAVY COMPLEX, KARAİKAL - 609 604.
Ph.No: 04368 - 235076 Fax.No : 04368 - 238126

No. : CA/KKL/HR/HRD/STU.TRG/BTECH/2022-23/029

Date: 23.05.2022

Work Centre : Cauvery Asset, Karaikal

CERTIFICATE

This is to certify that **Mr. Robin Antony J** Student of **Third year, B.Tech, Petroleum Engineering, JCT College of Engineering and Technology, Coimbatore** has undergone Summer/Winter/Industrial Training at ONGC from **09.05.2022 to 23.05.2022**. He has successfully completed his project work / Inplant training in the discipline of Petroleum. During the training, he took keen interest in the assigned work. We wish him all success in his academic endeavors and life.



B. Aruldevi
23/05/2022
Co - ordinator Training
ONGC

बी. अरुलदेवी / B. ARULDEVI
वरिष्ठ मानव संसाधन अधिकारी / Sr. HR Executive
ओ एन जी सी. कावेरी परिसम्पत्ति, कारैकाल
ONGC, Cauvery Asset, Karaikal



OIL AND NATURAL GAS CORPORATION LIMITED

CAUVERY ASSET - HR/ER - IR
NERAVY COMPLEX, KARAIKAL - 609 604.
Ph.No: 04368 - 235076 Fax.No : 04368 - 238126

No. : CA/KKL/HR/HRD/STU.TRG/BTECH/2022-23/030

Date: 23.05.2022

Work Centre : Cauvery Asset, Karaikal

CERTIFICATE

This is to certify that **Mr. Vasikaran V** Student of **Third year, B.Tech, Petroleum Engineering, JCT College of Engineering and Technology, Coimbatore** has undergone Summer/Winter/Industrial Training at ONGC from **09.05.2022 to 23.05.2022**. He has successfully completed his project work / Inplant training in the discipline of Petroleum. During the training, he took keen interest in the assigned work. We wish him all success in his academic endeavors and life.



B. Aruldevi
23/05/2022
Co - ordinator Training
ONGC

बी. अरुलदेवी / B. ARULDEVI
वरिष्ठ मानव संसाधन अधिकारी / Sr HR Executive
ओ एन जी सी, कावेरी परिसम्पत्ति, कारैकाल
ONGC, Cauvery Asset, Karaikal



OIL AND NATURAL GAS CORPORATION LIMITED

CAUVERY ASSET - HR/ER - IR
NERAVY COMPLEX, KARAIKAL - 609 604.
Ph.No: 04368 - 235076 Fax.No : 04368 - 238126

No. : CA/KKL/HR/HRD/STU.TRG/BTECH/2022-23/031

Date: 23.05.2022

Work Centre : Cauvery Asset, Karaikal

CERTIFICATE

This is to certify that Mr. Sam Daniel M Student of Third year, B.Tech, Petroleum Engineering, JCT College of Engineering and Technology, Coimbatore has undergone Summer/Winter/Industrial Training at ONGC from 09.05.2022 to 23.05.2022. He has successfully completed his project work / Inplant training in the discipline of Petroleum. During the training, he took keen interest in the assigned work. We wish him all success in his academic endeavors and life.



B. Aruldevi
23/05/2022
Co - ordinator Training
ONGC

बी. अरुलदेवी / B. ARULDEVI
वरिष्ठ मानव संसाधन अधिकारी / Sr HR Executive
ओ एन जी सी कावेरी परिसम्पत्ति कारैकाल
ONGC, Cauvery Asset, Karaikal



OIL AND NATURAL GAS CORPORATION

CAUVERY ASSET- HR/ER - ESTABLISHMENT SECTION

NERAVY COMPLEX, KARAİKAL - 609 604.

Ph.No: 04368 - 235054, 235057, 235058, 235060 Fax.No : 04368 - 238126

No. : CA/KKL/HR/HRD/STU.TRG/B.Tech/2022-23/153

Date: 05.09.2022

Work Centre : Cauvery Asset, Karaikal

CERTIFICATE

This is to certify that Ms. **Poojaa T D** Student of **Third year, B.Tech, Petroleum Engineering, JCT College of Engineering and Technology, Coimbatore** has undergone Summer/Winter/Industrial Training at ONGC from **22.08.2022 to 05.09.2022**. She has successfully completed her project work / Inplant training in the discipline of Petroleum Engineering. During the training, she took keen interest in the assigned work. We wish her all success in her academic endeavors and life.



B. Aruldevi
05/09/2022
Co - ordinator Training
ONGC

बी. अरुलदेवी / B. ARULDEVI
वरिष्ठ मानव संसाधन अधिकारी / Sr. HR Executive
ओ एन जी सी, कावेरी परिसम्पत्ति, कारैकाल
ONGC, Cauvery Asset, Karaikal

Date: 19.08.2022

CERTIFICATE

This is to certify that Poojaa T D, studying Third year B.Tech .Petroleum Engineering, of JCT College Of Engineering And Technology,Coimbatore has undergone Internship Training in M/s. Southern Petrochemical Industries Corporation Ltd SPIC Nagar, Tuticorin.

Internship Training details are as furnished below:

1) Type of Training Imparted	INTERNSHIP TRAINING
2) Period of Institutional Training	08.08.2022 to 19.08.2022
3) Allotment of Department	AMMONIA PLANT
4) Conduct & Character	GOOD
5) Performance during Training	GOOD
6) Attendance during Training	REGULAR

R. Ramkumar
19/8/22

R. Ramkumar
Joint Manager – Training & Development



Southern Petrochemical Industries Corporation Limited

(CIN: L11101TN1969PLC005778)

Factory: SPIC Nagar, Muthiahpuram Post, Tuticorin 628 005 Tamilnadu, India.

Phone : +91 (0461) 2355401 | Email : spiccorp@spic.co.in | www.spic.in



OIL AND NATURAL GAS CORPORATION LIMITED

CAUVERY ASSET- HR/ER - ESTABLISHMENT SECTION
NERAVY COMPLEX, KARAIKAL - 609 604.

Ph.No: 04368 - 235054, 235055, 235057, 235058, 235060 Fax.No : 04368 - 238126

No. : CA/KKL/HR/HRD/STU.TRG/B.TECH/2022-23/001

Date: 14.03.2022

Work Centre : Cauvery Asset, Karaikal

CERTIFICATE

This is to certify that Ms. ANUSIYA.C Student of Third year B.Tech., Petroleum Engineering, JCT College of Engineering and Technology, Coimbatore has undergone Summer/Winter/Industrial Training at ONGC from 15.02.2022 to 14.03.2022. She has successfully completed her project work / Inplant training in the discipline of PETROLEUM ENGINEERING. During the training, She took keen interest in the assigned work. We wish her all success in her academic endeavors and life.



14.03.22
Co - ordinator Training

ONGC
उपा प्रभार / UPA PRASHAKAR
उप महाप्रबंधक (आ.सं.) / Dy. General Manager (A.S.)
ओ एन जी सी कार्बो परिसर, काराईकल
ONGC, Cauvery Asset, Karaikal



OIL AND NATURAL GAS CORPORATION LIMITED
Skill Development Centre, Chennai

CERTIFICATE

*This is to certify that Mr. S. Mukilan
3rd Year student of B.Tech Petroleum Engineering
JCT College of Engineering, Coimbatore
has undergone Student's Internship Training in ONGC, Chennai
from 25th July 2022 to 18th August 2022, under the guidance of
Petroleum Engineering Experts of ONGC, Chennai
He has successfully completed the Training on
'Study of Petroleum Engineering in ONGC'
We wish all success in the academic endeavors and life.*

Certificate No. ONGC/SDC/CH/B.Tech/S/2022-23

Place: Chennai

Date: 22 August 2022.

S. Ravichandran
Chief General Manager (D)
Head Skill Development Centre



OIL AND NATURAL GAS CORPORATION LIMITED
Skill Development Centre, Chennai

CERTIFICATE

*This is to certify that Mr. V.C. Chirpykumaran
3rd Year student of B.Tech Petroleum Engineering*

JCT College of Engineering, Coimbatore

*has undergone Student's Internship Training in ONGC, Chennai
from 25th July 2022 to 18th August 2022, under the guidance of
Petroleum Engineering Experts of ONGC, Chennai*

*He has successfully completed the Training on
'Study of Petroleum Engineering in ONGC'*

We wish all success in the academic endeavors and life.

Certificate No. ONGC/SDC/CH/B.Tech/S/2022-23

Place: Chennai

Date: 22 August 2022.

S. Ravichandran

*Chief General Manager (D)
Head Skill Development Centre*



OIL AND NATURAL GAS CORPORATION LIMITED
Skill Development Centre, Chennai

CERTIFICATE

*This is to certify that Mr. M. Jagath Ratchagan
3rd Year student of B.Tech Petroleum Engineering*

JCT College of Engineering, Coimbatore

*has undergone Student's Internship Training in ONGC, Chennai
from 25th July 2022 to 18th August 2022, under the guidance of
Petroleum Engineering Experts of ONGC, Chennai*

*He has successfully completed the Training on
'Study of Petroleum Engineering in ONGC'*

We wish all success in the academic endeavors and life.

Certificate No. ONGC/SDC/CH/B.Tech/S/2022-23

Place: Chennai

Date: 22 August 2022.

S. Ravichandran

Chief General Manager (D)

Head Skill Development Centre



ऑयल एण्ड नेचुरल गैस कारपोरेशन लिमिटेड
Oil and Natural Gas Corporation Limited
ओएनजीसी अकादमी, देहरादून
ONGC Academy, Dehra Dun
ISO 9001 : 2015 Certified

Training Completion Certificate

This is to certify that Mr./Ms. R. Jeevanathin a student of "JCT College of Engineering and Technology, Coimbatore" has undergone Winter/Industrial Training at ONGC, Dehradun from 13.12.2021 to 13.01.2022. He/She has successfully completed his/her project work on the topic "Unusual Situation in Well Killing". During the training, he/she took keen interest in completing the assigned work.

We wish him/her all the success in his/her academic endeavors and in life.

Date: 01.02.2022

In Charge

Students Academic Intensive Learning

Winner of Golden Peacock National Training Award 2005, 2006 & 2014 Winner of ISTD Award 2008 & 2013



ऑयल एण्ड नेचुरल गैस कारपोरेशन लिमिटेड
Oil and Natural Gas Corporation Limited
ओएनजीसी अकादमी, देहरादून
ONGC Academy, Dehra Dun
ISO 9001 : 2015 Certified

Training Completion Certificate

This is to certify that Mr./Ms. Akshay D C a student of "JCT College of Engineering and Technology, Coimbatore" has undergone Summer/Industrial Training at ONGC, Dehradun from 19.07.2021 to 18.08.2021. He/She has successfully completed his/her project work on the topic "Study on Managed Pressure Drilling Techniques and Its Application in HPHT and ERD Wells". During the training, he/she took keen interest in completing the assigned work. We wish him/her all the success in his/her academic endeavors and in life.

Date: 17.09.2021

In Charge

Students Academic Intensive Learning

Winner of Golden Peacock National Training Award 2005, 2006 & 2014 Winner of ISTD Award 2008 & 2013

MRPL/TRG/Ref.No.012/2021-22
30th DEC, 2021

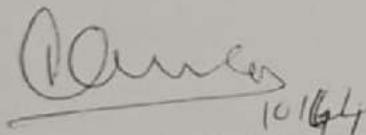
TRG/F/05

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr. AMAL PAUL SHAJU (Reg.No: 720918219002) B-TECH (Petroleum Engineering)** student of **JCT College of Engineering and Technology Coimbatore**, has successfully completed internship training in our organization from 18.12.2021 to 30.12.2021.

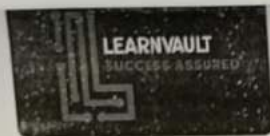
We wish success in his future endeavours.

For Mangalore Refinery and Petrochemicals Ltd.,



**VEENA T SHETTY
DGM (TRAINING)**

मंगलूर रिफाइनरी एण्ड पेट्रोकेमिकल्स लिमिटेड
Mangalore Refinery & Petrochemicals Ltd.
कुत्तेतूर पोस्ट, वीआ कटिपल्ला Kuthethoor Post, Via Katipalla
मंगलूर Mangaluru - 575 030



LearnVault

UCIE

UPES Council for Innovation
and Entrepreneurship

CERTIFICATE OF COMPLETION

THIS CERTIFICATE IS PROUDLY PRESENTED TO

Aromal Biju

For the successful completion of Summer Internship on the topic "Use of Polymer for Enhanced Oil Recovery Process" conducted by LearnVault (Incubated with University of Petroleum and Energy Studies Council for Innovation and Entrepreneurship) .

We found him/her sincere, meticulous, enthusiastic and result oriented.
We wish him/her all the success in life.

Start date: 21 June 2021

End date: 04 August 2021

Mr. Kushal Jategaonkar
Founder and CEO
LearnVault

Mr. Nitin Kulkarni
Former Senior Engineer
Kuwait Oil Company
(Internship Mentor)



3rd October 2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **S.CHANDRU** – Register number – **720918219009**, B.Tech Petroleum Engineering from JCT College of Engineering and Technology, Coimbatore, has successfully completed a 60 days internship with Sriluck paints from 2nd August, 2021 to 3rd October, 2021. He worked with us as a General intern.

During the period of this internship, He worked in the following areas:

1. Understanding the details of our manufacturing process and industry requirements.
2. Observing experiments to measure the effect of various parameters on our Water-Based paints manufacturing process.
3. Understanding the components that produce defect in paints.

During this internship, he has shown excellent problem-solving skills and a keen understanding of the basic concepts. We wish his good luck and success in all his future endeavors.

Srinivasan. G M

For PETROGANG PAINTS
Gm
Proprietor

Proprietor, Petrogang Paints.



3rd October 2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **K.DINESH** – Register number – **720918219010**, B.Tech Petroleum Engineering from JCT College of Engineering and Technology, Coimbatore, has successfully completed a 60 days internship with Sriluck paints from 2nd August, 2021 to 3rd October, 2021. He worked with us as a General intern.

During the period of this internship, He worked in the following areas:

1. Understanding the details of our manufacturing process and industry requirements.
2. Observing experiments to measure the effect of various parameters on our Water-Based paints manufacturing process.
3. Understanding the components that produce defect in paints.

During this internship, he has shown excellent problem-solving skills and a keen understanding of the basic concepts. We wish his good luck and success in all his future endeavors.

Srinivasan. G M

For PETROGANG PAINTS

G.M
Proprietor

Proprietor, Petrogang Paints.



मुख्य महाप्रबंधक (प्रशिक्षण)
प्रयोगशाला प्रमुख एवं प्रशिक्षण प्रमुख
आर्ट्स और एम्स, ओ. एन. जी. सी.
Adarsh Kumar Jain
Chief Gen. Manager (Chemistry)
Head-Labs & Training Head
IRS, ONGC

ऑयल एण्ड नैचुरल गैस कॉर्पोरेशन लिमिटेड
चांदखेडा परिसर, अहमदाबाद-380005, गुजरात, इंडिया
Institute of Reservoir Studies
Oil and Natural Gas Corporation Limited
Chandkheda Campus, Ahmedabad-380 005, Gujarat, India
Phone: +91 79 2329 5620, Fax: +91 79 2329 1662
Mob: 09435717839, E-mail: jain_adarshkumar@ongc.co.in

Internship Certificate

This is to certify that **Mr./Ms. Faiyaz F, B.Tech (Petroleum Engineering), JCT College of Engineering and Technology, Coimbatore** carried out internship project at Institute of Reservoir Studies (IRS), ONGC, Ahmedabad from 6th Dec 2021 to 31st Dec 2021. During training with us, he/she has gained good knowledge in the area of Polymer based CEOR and submitted Project Report on "Study on the Screening Criteria and the Field Implementation of Polymer based CEOR Method".

The student completed the project successfully, under the guidance of **Dr. Mrinmoy Biswas, Sr. Chemist**. He/she is sincere and showed a positive attitude towards attainment of the project objective.

We wish a bright and successful career in his/her academic endeavors and life.

Place: Ahmedabad
Date: 1st Feb, 2022

Adarsh Kumar Jain

(Adarsh Kumar Jain)
CGM (Chemistry)

आदर्श कुमार जैन
ADARSH KUMAR JAIN
Head-Labs & Training



UPES Council for Innovation
and Entrepreneurship



LearnVault



Petro Proficient

CERTIFICATE OF COMPLETION

THIS CERTIFICATE IS PROUDLY PRESENTED TO

Hariprasath P

For the successful completion of Summer Internship on the topic "Use of Polymer for Enhanced Oil Recovery Process" conducted by LearnVault (Incubated with UPES E-CELL) and in collaboration with 'Petro Proficient'.

We found him/her sincere, meticulous, enthusiastic and result oriented.
We wish him/her all the success in life.

Start date: 21 June 2021

End date: 04 August 2021

Mr. Kushal Jategaonkar
Founder and CEO
LearnVault

Mr. Nitin Kulkarni
Former Senior Engineer
Kuwait Oil Company
(Internship Mentor)

Date: 05/08/2021

Certificate ID: SI-JUN21-034

MRPL/TRG/Ref.No.011/2021-22
30th DEC, 2021

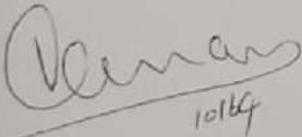
TRG/F/05

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr. JOESTEEVE S VELIYATH (Reg.No: 720918219015) B-TECH (Petroleum Engineering)** student of **JCT College of Engineering and Technology Coimbatore**, has successfully completed internship training in our organization from 18.12.2021 to 30.12.2021.

We wish success in his future endeavours.

For Mangalore Refinery and Petrochemicals Ltd.,



**VEENA T SHETTY
DGM (TRAINING)**

मंगलूर रिफाइनरी एंड पेट्रोकेमिकल्स लिमिटेड
Mangalore Refinery & Petrochemicals Ltd.
कुत्तेशूर पोस्ट, वाया कटिपल्ला, मंगलूर - 575 030
Kuthethur Post, Via Katinalla
Mangaluru - 575 030

पंजीकृत कार्यालय : कुत्तेशूर पोस्ट, वाया कटिपल्ला, मंगलूर - 575 030. (भारत)
Regd. Office : Kuthethoor P.O. Via Katinalla MANGALURU - 575 030 (India)



PETROLEUM ENGINEERS ASSOCIATION

(ISO 9001:2015, MSME Certified)

Deoghar, Jharkhand-814112, India

Scan
For Certificate
Verification

CERTIFICATE OF COMPLETION

Credential ID :
PEA-2021-PPE&Px0043

Issue Date :
23-April-2021

This certificate is presented to

THEKSHIN KARTHIK Ma.S

Has successfully completed a 15 days internship on the topic

**"PRODUCTION PRACTICES IN THE E&P
SECTOR OF OIL AND GAS INDUSTRY"**

under the guidance of **Mr. Adityam Dutta**

(Assistant Professor at Lovely Professional University

rganized by **Petroleum Engineers Association.**

Mr. Adityam Dutta
Assistant Professor at
Lovely Professional
University

Mr. Nikhil Agarwal

Founder & CEO
Petroleum Engineers Association

Website: www.peassociations.com

P.E.A.2021



3rd October 2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **M.HARIRAJAN** – Register number – **720918219701**, B.Tech Petroleum Engineering from JCT College of Engineering and Technology, Coimbatore, has successfully completed a 60 days internship with Sriluck paints from 2nd August, 2021 to 3rd October, 2021. He worked with us as a General intern.

During the period of this internship, He worked in the following areas:

1. Understanding the details of our manufacturing process and industry requirements.
2. Observing experiments to measure the effect of various parameters on our Water-Based paints manufacturing process.
3. Understanding the components that produce defect in paints.

During this internship, he has shown excellent problem-solving skills and a keen understanding of the basic concepts. We wish his good luck and success in all his future endeavors.

Srinivasan. G M

For PETROGANG PAINTS

G.M.

Proprietor

Proprietor, Petrogang Paints.



an For
ertificate Verification

PETROLEUM ENGINEERS ASSOCIATION

(An ISO 9001:2015, 14001:2015, 45001:2018, 21001:2018 and 29990:2010 Certified Company & MSME Certified)



ACCREDITED
Engineers
Certification
Body



Credential ID :
PEA-2021-DWC-xY0015

Issue date:
16 November 2021

Course Code :
PEA-DWC-CO02X



CERTIFICATE OF COMPLETION



This certificate is awarded to
S RONALDO SEBASTION

Has successfully completed 21 days' virtual internship program,
on the topic "**Drilling and Well Control**", under the guidance of
Mr. Adityam Dutta, organized by **Petroleum Engineers
Association** from **25th October 2021** to **15th November 2021**.

NO. OF CREDITS RECOMMENDED BY P.E.A: 5



Mr. Nikhil Agarwal

FOUNDER & CEO
PETROLEUM ENGINEERS
ASSOCIATION

Website: www.peassociations.com

P.E.A.2021

ANNA UNIVERSITY: CHENNAI 600 025

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Certified that this project report "UTILIZATION OF SMART WELL COMPLETION TECHNIQUES FOR PRODUCTION OPTIMIZATION IN COMPLEX WELL GEOMETRIES" is the Bonafide work of AMAL PAUL SHAJU, FAIYAZ F, JOESTEEVE S VELIYATH and MOHAMMED SHAHIN SHA Z, who carried out the project work under my supervision.


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Mr. PURUSHOTHAMAN V
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Submitted for the Project Viva-Voce Examination held on 24-06-2022


INTERNAL EXAMINER

(V. PURUSHOTHAMAN IAR)


EXTERNAL EXAMINER
(P. BABU)

PETROLEUM ENGINEERS ASSOCIATION

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Project Certificate

Credential ID :
PEA-A0XXCVPROJECT-02

Issue Date :
07-June-2022

This is to certify that **Mr. Amal Paul Shaju, B. Tech (Petroleum Engineering), JCT College of Engineering & Technology, Coimbatore** completed an internship project at Petroleum Engineers Association on **"Utilization of Smart Well Completions** and submitted a project report on **"Utilization of Smart Well Completion Techniques for Production Optimization in Complex Well Geometries"** from **7th May 2022 to 27th May 2022**.

The student completed the project successfully, under the guidance of **Mr. Nitin Kulkarni (Sr. Drilling Engineer)**. He showed a positive attitude towards the attainment of the project objective. He is sincere and did commendable study.

We wish him a successful career in his academic endeavors and life.

Nitin Kulkarni

Mr. Nitin Kulkarni
PROJECT MENTOR



Mr. Nikhil Agarwal
FOUNDER & CEO
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ABSTRACT

With improvements in technology and increasing amount of opportunities in more challenging assets, the use of smart well technologies to improve recovery has caught significant attention in the oil and gas industry in the last decade. Several workflows have been developed and proposed in order to automate the whole process that integrates several sub processes focusing on specific parts of the surface or subsurface phenomena. The value added by intelligent wells (I-wells) derives from real-time, reservoir and production performance monitoring together with zonal, downhole flow control. Unfortunately, downhole sensors that can directly measure the zonal flow rates and phase cuts required for optimal control of the well's producing zones are not normally installed.

Advanced Well Completions (AWCs) employing Downhole Flow Control (DFC) technology such as Inflow Control Devices (ICDs), Interval Control Valves (ICVs), Autonomous Inflow Control Devices (AICDs) and/or Annular Flow Isolations (AFIs) provide a practical solution to the challenges normally encountered by conventional wells.

The findings of this study showed it is not necessary to have the accurate estimation of zonal properties in order to maximize the oil production from a multi-zone I-well. The proposed ICM algorithm can also be applied in multi-well flow rate allocation of an interest production system network and optimization of start-up of multi-zone I-wells. In this study, the objective is to present the efficient use of ICVs in intelligent fields to maximize sweep, and thus, recovery tied to the objective function.

Keywords : Intelligent wells, Advanced Well Completions, Downhole Flow Control, Inflow Control Devices, Interval Control Valves, Autonomous Inflow Control Devices, Annular Flow Isolations.

CHAPTER: 9

SUMMARY

- 1) The performance of proposed active MPFR soft-sensing was tested under model and measurement uncertainty. The accuracy of the estimated zonal properties deteriorates due to the presence of noisy sensors within the wellbore monitoring system. This also implies the number of flow tests required by the soft-sensing algorithm to estimate the reservoir properties in a noisy environment at a given probability level will increase as the severity of the measurement drift or random noise level in the data increases.
- 2) An analysis of analytical reservoir/wellbore pressure and wellbore temperature models used in our algorithm concluded that errors in the temperature measurements have the least effect on the estimated zonal property values, when compared with errors in the measured well rates and pressures.
- 3) Zonal reservoir pressure is the least sensitive parameter to noisy measurements (relatively) while zonal annular gas mass fractions are the most sensitive ones to measurements with errors.
- 4) The active MPFR allocation workflow for active, MPFR allocation may also be used to design the wellbore monitoring system's measurement and downhole sensor metrology parameters to provide the best possible estimate of the downhole flow rates.
- 5) Installation of accurate, stable pressure sensors has the greatest impact on the overall accuracy of the well monitoring system. An equivalent improvement in the accuracy of the multi-phase flow meters and temperature sensors provides a smaller benefit.

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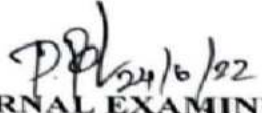
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ABSTRACT

Here we are fabricated the cooling tower , the aim of this unit is to convert the hot water into cold water with the help of fan arrangement . Cooling towers may either use the evaporation of water to remove process heat and cool the working fluid by using the air temperature. common application include cooling the circulating water used in the wash water system. This project we fabricate the temperature controller with cooling system. This concept is very helpful for so many areas. Unfortunately many off the shelf solutions for temperature control are not well suited to thermo electric world because they were designed for heating and cooling hardware that is very different and often for less than responsive the TE devices .

CHAPTER: 8

CONCLUSION

orks for obtaining values are summarized as follows:

The active multi-phase flow rate monitoring was combined with the production reactive control algorithm to develop the ICM workflow. The ICM workflow not only designs the required initial flow tests of the active soft- sensing workflow, but also provides simultaneous inflow rate monitoring and oil production control.

The successful results were reported in this work from the application of ICM workflow to monitor the zonal properties and maximize the oil production for a five- zone I-well.

The ICV positions are the key variables to achieve the purposes of monitoring and controlling in the ICM work- flow. They are regulated to maximize the oil production during $(n + 1)$ flow rate tests in n -zone I-wells.

Additional flow tests by further regulation of the ICVs are designed by the DC optimizations method. DC optimization provides the flexibility of defining different objective functions such as optimizing the ICV positions to achieve either maximum reliability of the zonal proper- ties or maximum oil production.

Although ICM workflow may not meet monitoring pur- poses (zonal rates estimation) accurately compared to separate monitoring and control approach, it brings the added value into the well by increasing the cumulative oil production during the flow tests period.

The ICM workflow provides instantaneous production increase to ensure that minimum production loss occurs during the monitoring and test design in which the production is disturbed by manipulating the downhole valves.

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The data shows that by realizing the full potential of intelligent well completions, instantaneous and long-term gains can be harvested. The lesson learned and experiences gained from smart wells justify the accelerated paradigm shift towards intelligent fields. The impacts of utilizing smart wells in the above mentioned field are as follows:

Smart wells can increase production gains by tailoring individual lateral setting in an MRC well. Downhole flow control can mitigate the risk of undesired fluid breakthroughs and minimize its production.

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Certified that this project report "DESIGN AND FABRICATION OF IOT BASED LIQUEFIED PETROLEUM GAS LEAKAGE DETECTOR" is the bonafide work of NAGARJUN B (720918219020), SANKAR RAJA E (720918219023), SHAJIN JOE J (720918219031) and SURIYA R (720918219038) who carried out the project work under my supervision.


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INTERNAL EXAMINER


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ABSTRACT

This project proposes a LPG detection supported microcontroller using IOT devices. This project uses Petroleum sensor is used to detect gas leakage. If the LPG gas leakage is sensed automatically it will send data to the user. Node MCU Wi-Fi chip is used as a controller unit. The sensors data are fed into a Node MCU and it imports these data to a website that is accessible from anywhere by using the internet. This project is enhanced with flame sensor that used to prevent occurrence of fire accidents. We propose the usage of IOT techniques to automate the process of LPG gas detection for safety purposes. The proposed system is robust and it is unaffected by exceptional circumstances and achieves high level detection of LPG gas leakage. This project is implemented using micro controller based IOT.

CONCLUSION

In this project, the idea proposed would be another step towards LPG detection. This system would considerably reduce human intervention monitoring of the LPG gas and, it will also ensure human safety by preventing accidents due to gas leakage by turning off the gas valve when there is gas leakage. With appropriate configuration this system can also be scaled for its use in industries where heavy pipelines and cylinders are used. The proposed system when successfully implemented can also be used in mines where petroleum gas sensors will detect leakage of toxic gases and can send a signal for the emergency evacuation of workers.

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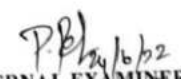
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CHAPTER-6

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Dr. S. VENKATESH BABU
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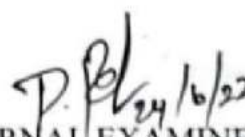
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Oil and Natural Gas Corporation Limited

**Centre of Excellence in Well Logging
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Certificate of Appreciation

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This Training is a part of the fulfilment of the Degree of B. Tech- Petroleum Engineering to be awarded to him by JCT college of Engineering and Technology, Coimbatore, Tamil Nadu, Affiliated to Anna University, Chennai, Tamil Nadu.

The project work was carried out from **15th March 2022 to 01st April 2022.**

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Executive Director
HEAD OF INSTITUTE
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Dr. S. VENKATESH BABU
PROFESSOR & HEAD

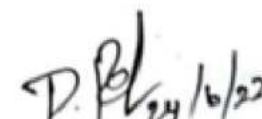
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ABSTRACT

The main goal of core analysis is to reduce uncertainty in reservoir evaluation by providing data representative of the reservoir at in-situ conditions. Basic core analysis measurements are unchanged, but advances in core analysis techniques provide the ability to measure the required petrophysical properties at reservoir conditions and to acquire also simultaneous measurements of reservoir dependent parameters.

Core analysis provides the only direct and quantitative measurement of "intact" oil and gas reservoir properties. It should provide the foundation of formation evaluation for building static and dynamic reservoir models. However, it is estimated that approximately 70% of core analysis data are unfit for purpose as a consequence of ill-conceived test programme design, lack of planning, poor laboratory practice, inadequate reporting standards and unrepresentative test samples or test conditions.

This chapter explains why a best practice guide to core analysis data acquisition is needed, and outlines a core analysis management framework to ensure effective quality control of test data and minimize data uncertainties. The objectives are to provide reservoir engineers, geoscientists and Petrophysicists with a solid grounding in the acquisition, evaluation and implementation of reliable and representative routine core analysis and special core analysis data, and the essential knowledge to be able to judge the quality and reliability of core analysis data that are used in reservoir valuation and characterization.

CHAPTER: 8

CONCLUSION

Steps for obtaining values are summarized as follows:

The active multi-phase flow rate monitoring was combined with the production reactive control algorithm to develop the ICM workflow. The ICM workflow not only designs the required initial flow tests of the active soft-sensing workflow, but also provides simultaneous inflow rate monitoring and oil production control.

The successful results were reported in this work from the application of ICM workflow to monitor the zonal properties and maximize the oil production for a five-zone I-well.

The ICV positions are the key variables to achieve the purposes of monitoring and controlling in the ICM workflow. They are regulated to maximize the oil production during $(n + 1)$ flow rate tests in n -zone I-wells.

Additional flow tests by further regulation of the ICVs are designed by the DC optimizations method. DC optimization provides the flexibility of defining different objective functions such as optimizing the ICV positions to achieve either maximum reliability of the zonal properties or maximum oil production.

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Steps for Production Monitoring and Control are summarized as follows:

The data shows that by realizing the full potential of intelligent well completions, instantaneous and long-term gains can be harvested. The lesson learned and experiences gained from smart wells justify the accelerated paradigm shift towards intelligent fields. The impacts of utilizing smart wells in the above mentioned field are as follows:

Smart wells can increase production gains by tailoring individual lateral setting in an MRC well.

Downhole flow control can mitigate the risk of undesired fluid breakthroughs and minimize its production.

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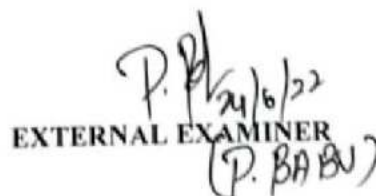

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Date: 27.05.2022

Work Centre : Cauvery Asset, Karaikal

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Co - ordinator Training
ONGC
A.S. YADAV
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ABSTRACT

The well bore problems like pipe stuck up, objects lost ,mud loss and string failure are solved by fishing operations & lost circulation. In fishing operations for every above-mentioned problem's there is a solution. The stuck up of the pipe can know by the free point instrument or monograph or straight-line curve method. For sticking we will use spotting fluid, if the string not released we will perform back off methods. If there is no result we will use the parting pipe methods. Fishing also have economical and time considerations. If the string is not released we will do cement plug. After the cement plug side tracking operation will be performed for further drilling operation. In the process of retrieving the fish we will use so many methods . Lost circulation occurs when the fluid in the hole (usually drilling fluid) flows into the formation due to the type of formation and the hydrostatic overbalance of the fluid in the hole. The purpose of this study is to develop practical guidelines that are general and not biased towards a particular service company product and which will also serve as a quick reference guide for lost circulation prevention and control at the well-site for drilling personnel.

Key words:

Pipe stuck up, object lost, failure are solved by fishing operations ,back off tool ,lost circulation, loss zone.

CHAPTER 18

18. CONCLUSION

Drilling a well is not an easy task, we encounter with many problems while drilling. Pipe sticking, Object loss, mud loss, Miscellaneous problems and Failure of Equipment's are also the problems we face during drilling.

These problems can be solved through the fishing tools & LCM Materials. Major of the problems occurred during drilling generally not familiar to us. We need to be ready to face the problem by executing new plans under economic conditions and safety measures.

Fishing is also done under economical consideration. If the problem solution is under economical consideration, fishing operation will be considered otherwise sidetracking or well is abandoned.

Fishing services are provided by Schlumberger, Halliburton, Weatherford, Baker Hughes's and mainly Bowen Tool Services. These companies are developing technology day by day and solving the problems in a short span of time.

Time consideration is also a main important factor in fishing operation. if we apply wrong method of fishing, it will be effective on cost and time. We must study the problem occurred and apply the suitable method for it.

BONAFIDE CERTIFICATE

Certified that this project report “WELL CONTROL PRACTICES AND COMMONLY ENCOUNTERED DOWNHOLE COMPLICATIONS” is the Bonafide work of HARIRAJAN.M, BALAMURALI.N, and SHANIO.A, who carried out the project work under my supervision.



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Dr. Venkatesh Babu

Professor and Head

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ABSTRACT

Oil well cementing is considered as one of the foremost important and challenging operations in drilling. The main purpose of cement in wellbores is to provide zonal isolation, and support for casing. Properties of oil well cement should be taken into consideration to assure a high-quality cementing job. The objective of this study was to investigate the effect of unconventional additives such as organic ash and wheat of stalks were used to know the effect of these additions on the properties of cement such as density, resistivity, water content, setting time and compressive strength. As for the effect of density when adding organic ash, there is no noticeable effect and the effect of density in adding a substance to the organic ash is less than the wheat stalks. There was no cohesion and it was noted that the time of solidification when adding ash to the cement paste started to increase gradually with the passage of time. The result of the resistivity when adding the organic ash material began to increase gradually, but when adding wheat stalks material to the cement the resistivity decrease, where The compressive strength began to increase with the increase in the amount of adding organic ash to the cement paste, while when adding wheat of stalks to the cement paste, the sample failed and crumbled by itself and the compressive strength was not obtained for it, while the water content began to decrease gradually as the amount of addition of organic ash to the cement paste was increased. While in adding wheat of stalks to cement paste, there is no water content.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1: Conclusions

1. Thickening time increases with increase amount of (organic ash, wheat of stalks).
2. Thickening time for organic ash is greater than wheat stalks.
3. The compressive strength for organic ash decreases at 30 and 40 gm for organic ash but increases for 50 gm added.
4. The shear stress and shear rates plot of cement slurry with organic ash and wheat stalks additive show of Bingham Plastic fluid can be inferred this cement slurry.
5. The slurry density is small increase for organic ash additive but it small decrease with wheat stalks additive.
6. The resistivity of cement slurry increases with the increase amount of organic ash but decrease with increase amount of wheat stalks.
7. The free water content decrease with increase amount of organic ash.
8. The addition of organic ash increases the tightness and resistance to the penetration of chloride ions of concrete.

5.2: Recommendations

From the data collected and the research investigations the results lead to recommend using organic ash as additive for cement slurry.

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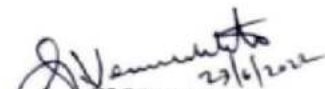
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Certified that this project report "EFFECTS OF DIFFERENT RAW MATERIALS ON RHEOLOGICAL PROPERTIES SPECIAL LOST CIRCULATION OF WATER-BASED MUD" is the bonafide work of of HARIPRASATH.P (720918219014), SANJEEV.R (720918219022), SARAVANAN.S (720918219028), ARUN KUMAR.A (720918219006) who carried out the project work under my supervision.


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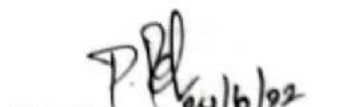

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12/05/2022
Co - ordinator Training
ONGC

बी. अरुलदेवी / B. ARULDEVI
सीए कावरी संपन्न अधिकारी / Sr. HR Executive
ओएनजीसी, कावरी परिसर, काराikal
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6.1 LIMITATION

The main limitation of this methodology is the unavailability of flow meter that can be used in the down-hole during the drilling process.

However, there is a possibility that down-hole flow and density meters for drilling purposes will be available in the near future. The proposed methodology can facilitate good results when it is used on the wellbore with Wired Drill Pipe Telemetry. It can be used on any well with other types of telemetries (such as mud pulse telemetry or electromagnetic telemetry) but it would not be possible to transmit any abnormality that might exist during the non-circulation period.

6.2 CONCLUSIONS

The experimental setup has been successfully developed and tested. The outcomes of experiments verify the expected behaviour of the variables during an abnormal well condition.

6.2.1 The density and conductivity of the drilling fluid, down-hole pressure, and mass flow rate provides the clear evidence of inflow of formation fluid.

6.2.2 The increase in down-hole pressure measurement

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BONAFIDE CERTIFICATE

Certified that this project report "EFFECTS OF ORGANIC ASH AND WHEAT STALKS ON THE BEHAVIOR OF OIL WELL CEMENT PROPERTIES" is the bonafide work of of SHAHUL HAMEED.S (720918219030), SANTHOSH KUMAR.P (720918219025), SANTHOSH.J (720918219024), SIVANESH.S (720918219036) who carried out the project work under my supervision.


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Submitted for the project viva-voice examination held on 24.06.2022


INTERNAL EXAMINER


EXTERNAL EXAMINER
(P. BABU)



OIL AND NATURAL GAS CORPORATION LIMITED

CAUVERY ASSET - HR/ER - IR
NERAVY COMPLEX, KARAIKAL - 609 604.
Ph.No: 04368 - 235076 Fax.No : 04368 - 238126

No. : CA/KKL/HR/HRD/STU.TRG/BTECH/2022-23

Date: 12.05.2022

Work Centre : Cauvery Asset, Karaikal

CERTIFICATE

This is to certify that **Mr. Shahul Hameed S** Student of **Final year, B.Tech, Petroleum Engineering, JCT College of Engineering and Technology, Coimbatore** has undergone Summer/Winter/Industrial Training at ONGC from **25.04.2022 to 09.05.2022**. He has successfully completed his project work / Implant training in the discipline of Petroleum. During the training, he took keen interest in the assigned work. We wish him all success in his academic endeavors and life.



E. Aruldevi
10/05/2022
Co-ordinator Training
ONGC

श्री. अरुलदेवी / B. ARULDEVI
टीएच.एस.एस.टी. / Sr. HR Executive

Chapter 5

Conclusions and Recommendation

1.1 Conclusions

In this study, the effect of different raw materials on the rheological properties of water-based mud, oranges, bananas, tea and hay were used at an amount of (1,2,3,5) gm for each one. From the results, the following was concluded:

- The highest value of the viscosity was at 3 grams of orange, meaning that the drilling process is slow. The process of carrying the rock pieces upwards is done well. The lowest value of the viscosity was at 1 gram of hay, as the drilling process is faster as well as the case for 2 grams of tea residue and hay and 3 grams of bananas.
- The thickness of the mud cake at 2 grams of tea residue was the lowest for the rest of the materials in the experiment. The thickness of the mud cake at 2 grams of banana and 3 grams of orange peels was the highest for the rest of the materials in the experiment.
- With the increase in the weight of the additives, the Ph of the material decreases. The highest value of yp was at 1gm tea. The lowest value of it was at 2gm orange peels and 2gm tea residue.
- With the increase of yp, the proportion of lifting excavated rocks to the top increases. 5- The highest value of shear stress was at 5 gm orange peels 6- The highest gs values were recorded when using hay.
- The lowest loss of drilling fluid is from tea, and after that, hay is ranked second, and the highest fluid loss is banana and orange, which is not desirable for drilling fluid WBM in drilling operations because of the large loss of drilling fluid see Fig4.25.

1.2 Recommendation

Formation damage system (FDS) test should be further analyzed by varying more particle size of lost circulation material used and quantity of lost circulation material added in drilling fluid. Economic evaluation shall be conducted to compare the effectiveness of the formulation to be used in the industry.



DEPARTMENT OF MECHANICAL ENGINEERING ACADEMIC YEAR - 2021-2022 (EVEN SEM)

YEAR / SEM

IV / VIII

PROJECT WORK

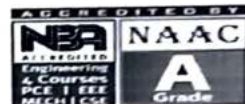
S.No	Batch	Reg.No	Name of the Student	Name of the Guide	Project Title
1	I	720918114028	BAHUL P S	Mr R MALAI RAJA	DESIGN AND FABRICATION OF FOOD WASTE COMPOST MACHINE
2		720918114002	ABHINAND KRISHNA		
3		720918114044	VISHNU M		
4		72091811901	RITHIN PRAVEEN		
17	II	720918114018	JASWIN JAYAKUMAR	Mr M VIJAY KUMAR	PHYSICAL AND FUEL CHARACTERISTICS OF BROOKETTES PRODUCED FROM KULMATHOTTI JERURAL
18		720918114020	MOHAMMED SAHAL J		
19		720918114022	MUHAMMED SHAFAS K A		
20		720918114024	PINJOTTER F THEERANATH		
5	III	720918114007	ALTHAF A	Dr J JISSAC PREMKUMAR	INTELLIGENT ACTIVE SUSPENDING SYSTEM FOR TWO WHEELER
6		720918114013	ARUN P K		
7		720918114016	HASHIM S K		
8		720918114045	VISHNU K P		
9	IV	720918114006	AKHIL BINJOY	Mr M PHILAMINO ANTO	SOLAR STREET LIGHT WITH AUTO INTENSITY CONTR
10		720918114008	AMAL K S		
11		720918114011	ANILJITH V P		
12		720918114015	GOKUL M		
41	V	720918114048	PUGAZHENTHI	Mr R KRISHNA KUMAR	DEVELOPMENT OF JACKPOT PIEL WASTE AS BIO MASS ENERGY
42		720918114304	TOMCY ROY		
43		720918114041	VIGNESH S		
44		720918114034	SRI DHAR K		
13	VI	720918114032	SIVALAL M	Mr M PRABHU	HYDRAULIC DOUBLE T JACK IN AUTOMOTIVE VEHICLES
14		720918114043	VISAKH M S		
15		720918114301	ANANDU K		
16		720918114302	ANSON A A		

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29	VII	720918114504	SAMUVEL SEBASTIAN	Mr D ANANDHA KUMAR	FABRICATION OF AUTOMATIC FIRE FIGHTING ROBOT
30		720918114017	IRSHAD I		
31		720918114026	PREMITH		
32		720918114001	ABDUL BASIDE		
21	VIII	720918114047	VYSAO S	Dr J PRABHAKAR	PHYSICAL PROPERTIES OF CARBONIZED CORNCOB BRIQUETTE
22		720918114033	SREERAG A		
23		720918114009	AMAL V JAYAPRAKASH		
24		720918114004	ADHILASIM		
25	IX	720918114005	AKASH S	Mr R MAHENDRAN	EXPERIMENTAL OF MECHANICAL AND PHYSICAL PROPERTIES OF FLAX AND BAMBOO
26		720918114010	AMARNATH A		
27		720918114042	VIJAYAKUMAR T		
28		720918114031	SHAMBARASAN G		
33	X	720918114036	SRIRAM K	Mr R KRISHNAKUMAR	DESIGN AND FABRICATION OF BOREING FIG
34		720918114023	PRAVEEN RAJ J		
35		720918114040	PACHAIARASAN		
36		720918114039	VASUDEVAN K		
37	XI	720918114027	RAGHUL R	Mr K KARTHICK	DESIGN AND ANALYSIS OF REAR SPOILER OF CARS
38		720918114040	VIGNESH M		
39		720918114014	DEEPAK KUMAR		
40		720918114030	SANJAY V		
45	XII	720918114035	SRIDHAR K	Mr M PRABHU	DESIGN AND FABRICATION OF TIG WELDING

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DEPARTMENT OF MECHANICAL ENGINEERING

ME8682 - DESIGN AND FABRICATION PROJECT

CLASS / SEMESTER: III / VI

ACADEMIC YEAR 2021-2022

BATCH	REGISTER NUMBER	STUDENT NAME	PROJECT TITLE	GUIDE
1	720919114001	ABIJITH P	DESIGN AND FABRICATION OF AUTOMATIC HYDRAULIC JACK WITH CRANK MECHANISM	Prof. R. Prabhu
	720919114012	NIKHIL RAJ P		
	720919114020	VINEETH S		
2	720919114008	S.HARHARAN	DESIGN AND FABRICATION OF BOI MASS BRIQUETTES	Prof.R.Krishnakumar
	720919114010	M.MUTHUKUMAR		
	720919114308	B. VASUTHEVAN		
3	720919114302	ARAVIND KUMAR.G	DESIGN AND FABRICATION OF SEMI AUTOMATIC COMPRESSED AIR VEHICLE	Prof. R.Krishnakumar
	720919114303	ARJUN V U		
	720919114304	ASHWIN K. PATHROSE		
4	720919114309	POORNIMA V M	DESIGN AND FABRICATION OF AUTOMATIC DOOR OPENER USING PIR SENSOR	Prof. R.malainja
	720919114301	AKSHAI U		
	720919114305	FAWAS I		
5	720919114306	JAYAFIR, SADIQ P	DESIGN AND FABRICATION OF AUTOMATIC SIDE STAND FOR TWO WHEELER	Prof. Dr. J. Prabahar
	720919114007	GOWTHAM. M		
	720919114016	R.RAJESH KANNAN		
6	720919114311	AJITHKUMAR.R	DESIGN AND FABRICATION OF GENEVA CONVEYOR	Prof. Dr. S. Thillikazi
	720919114019	SRIJIL. E		
	720919114003	ASHIN M M		
7	720919114009	MOHAMMED SHAHEEN BIN SALEEM	DESIGN AND FABRICATION OF DUAL SIDE SHAPER MACHINE	Prof M. Vijaya kumar
	720919114022	RUTIK KUMAR RAM		
	720919114034	CHANDAN KUMAR		
8	720919114022	CHANDAN KUMAR	DESIGN AND FABRICATION OF PNEUMATIC BUMPER SYSTEM	Prof. M. Philomin Anto
	720919114041	RANJEET KUMAR RAM		
	720919114042	ITIHAS KUMAR		
9	720919114017	SHARUNRAJ. K	DESIGN AND FABRICATION OF AIR PURIFIER AND HUMIDIFIER USING WATER FILTER	Prof. Dr. I. J. Issac Prem kumar
	720919114029	ANIRUDH SADANANDAN		
	720919114006	GOKUL O M		
10	720919114008	HARIBHARAN S	DESIGN AND FABRICATION OF ECO-FRIENDLY ROAD & FLOOR SWEEPER MACHINE	Prof. M. Philomin Anto
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DESIGN & FABRICATION OF AUTOMATIC DOOR OPENER USING PIR SENSOR



A Project Report

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CHAPTER-1

1. ABSTRACT

Nowadays, there is a growing interest in the smart home system using Internet of Things. One of the important Aspect in the smart home system is the security capability which can simply lock and unlock the door or the gate. In this paper, we proposed a face recognition security system using NODE MCU which can be connected to the smart home system. Eigenface was used the feature extraction, while Principal Component Analysis was used as the classifier. The output of face recognition algorithm is then connected to the relay circuit, in which it will lock or unlock the magnetic lock placed at the door. Results showed the effectiveness of our proposed system, in which we obtain around 90% face recognition accuracy. We also proposed a hierarchical image processing approach to reduce the training or testing time while improving the recognition accuracy. The active process emits infrared signals from the controller and captures the reflected signals to determine if there is any object close to the door. This approach is accurate and capable of identifying the position and the speed of the object but its high cost has made it less popular. The ultrasonic/radio approach, on the other hand, emits ultrasonic or radio waves to scan the environment and analyzes the returned signals for door circuit. The passive IR approach detects the infrared signals radiated by people and is the most widely used for being simple, effective, and low cost.


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DESIGN & FABRICATION OF SEMIAUTOMATIC COMPRESSED AIR VEHICLE



A Project Report

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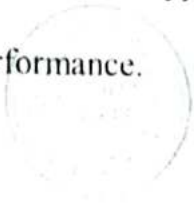
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CHAPTER-1

ABSTRACT

As the world is hard pressed with the energy and fuel crises, compounded by pollution of all kinds, any technologies that bring out the solutions to this problem is considered as a bounty. In one of such new technologies, is the development of a new car called as compressed air car which does not use any of the known fuels like diesel, petrol, CNG, LPG, hydrogen etc. this works using only compressed air. This replaces all types of to-date known fuels and also permanently solves the problems of pollution as its exhaust is clean and cool measured practically as low as 5°C . A proto type, a horizontal, single cylinder low speed engine was modified to run on compressed air. Since this engine runs only on high pressure compressed air, the exhaust of which is undoubtedly only air, it is a zero-pollution engine. No heat is generated because there is no combustion of fuel, hence this car needs no cooling system and it results in reduced cost, weight, volume and vibration. Early cost analysis shows that it's very cost effective and the operational cost is ten times less than that of petrol or diesel. Experimental analysis was carried out on this modified car to find out its performance characteristics like brake power, mechanical overall efficiency, air to air ratio, cost analysis etc. Though the efficiencies were low as the frictional forces were high for the proto designed engine, however the concept can be applied on a professionally designed engine to improve the vehicle performance.



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DESIGN & FABRICATION OF GENEVA CONVEYOR

A PROJECT REPORT

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CHAPTER 1

ABSTRACT

Geneva mechanism is a method to transform continuous circular motion into intermittent/fixed step circular motion i.e. a circular motion in equal intervals of time and resulting in the same displacement. The name “Geneva” is derived from Geneva, Switzerland where in its earliest days the device was used in mechanical watchmaking. The Geneva drive is also called a Maltese cross mechanism due to their visual similarity. A conveyer belt is basically a linear belt usually made up of rubber or plastic compounds (of high strength) combined with one or more layers of fabrics such as nylon, polyester, neoprene, or nitrile. It has a basic function of transporting material from one point to another. A simple Geneva mechanism consists of a drive wheel (connected to motor) and a driven wheel (connected to belt pulleys). The drive wheel is a disk with a pin or a shaft near its circumference. The drive wheel is kept next to the driven wheel in such a way that when the drive wheel is rotated, the pin or shaft fits inside the slot of driven wheel. As it reaches the inner most point of the slot, the pin exerts a force on the driven wheel. As the driven wheel is pivoted from the center, a moment is produced which causes the generation of a torque, leading to the rotation of the driven wheel and the pulley attached to it.

Hence, there is an intermittent circular motion in them resulting in the movement of the belt. There are several types of Geneva rotator such as external Geneva rotator, internal Geneva rotator and spherical Geneva rotator. The mechanism that I will be using for the conveyer belt is of an External Geneva rotator in which the rotating drive wheel interacts with the driven wheel externally. This mechanism results in instantaneous motion at regular intervals and can withstand higher mechanical stresses. The mechanism has numerous application in many industries especially the automobile industry.





DESIGN & FABRICATION OF AUTOMATIC SIDE STAND FOR TWO WHEELER



A Project Report

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CHAPTER-1

ABSTRACT

This project work titled **“AUTOMATIC STAND FOR TWO WHEELER FOR TWO WHEELER”** has been conceived having studied the difficulty in standing the any type of two wheeler vehicle. Our survey in the regard in several automobile garages, revealed the facts that mostly some difficult methods were adopted in standing the vehicles in rest.

Now the project has mainly concentrated on this difficulty, and hence a suitable motorized unit has been designed. Such that the vehicles can be stand the floor land without application of any impact force. By pressing the button in the dashboard, the motor will activates the stand automatically. The fabrication part of it has been considered with almost case for its simplicity and economy, such that this can be accommodated as one of the essential tools on automobile garages.





FABRICATION OF AUTOMATIC FIRE FIGHTING ROBOT

A PROJECT REPORT

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CHAPTER 1

ABSTRACT

Nowadays, machinery and robots design become important in helping human. This Fire Protection Robot was design to help people in any destructive burnt situation where this robot can extinguish burnt area immediately using autonomous system.

This autonomous system will be designed using programming in arduino and others additional circuit. In real life, destructive burnt area often happens without our realization. Therefore this type of robot will require a high demands in the market because of its usefulness to the human as well as the environment transmit fire information to authorities.

A robot is an automated device which performs functions usually attributed to humans or machines tasked with repetitive or flexible set of actions. Numerous studies have shown that robot can be beneficial in medicine, rehabilitation, rescue operation, and industry.

1.1 Project Objective

- To do the work efficiently
- To reduce the man power
- To reduce the human involvement
- To identify the place of fire and automated controlled on the fire, in hazardous areas

1.2 Project Outline

In this paper, a firefighting robot is proposed. The main function of this robot is to become an unmanned support vehicle, developed to search and extinguish fire. There are several existing types of vehicles for firefighting at home and extinguish forest fires. Our proposed robot is designed to be able to work on its own or be controlled automatically. By using such robots, fire identification and rescue activities can be done with higher security without placing fire fighters at high risk and dangerous conditions.



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FUEL CHARACTERIZATION OF
BRIQUETTES PRODUCED FROM
THAVIZHAMA VER



A PROJECT REPORT

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ABSTRACT

Briquette quality is evaluated mainly by briquette density. Briquette density is very important from the view of point of manipulation, burning speed, briquette durability, etc. The present study deals with the determination of physical and combustion characteristics like length, diameter, mass, density, moisture content, total ash content, fixed carbon, volatile matter, gross calorific values (as on basis & on dry basis) of Sawdust briquettes and thavizhama ver. During our research theoretical analyses of parameters which have an impact on briquette quality were conducted. For quality evaluation of the manufactured briquette, the density and strength properties were determined. To determine the calorific value and proximate analyses of briquettes using the test carried out in universal electro hydraulic machines ,Pollachi, Coimbatore ., and analyses the result in graphical representation.


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**EXPERIMENTAL OF MECHANICAL AND
PHYSICAL PROPERTIES OF FLAX
AND BAMBO**



A Project Report

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ABSTRACT

Due to environmental concerns Hybrid fibers are once again being considered as reinforcement for polymer composites. This present work evaluated on the mechanical properties of carbon and Flax/carbon fiber reinforced epoxy composites. In this work Flax fiber is used as reinforcement which treated with NAOH solution for enhancing the bonding strength between the fiber and matrix by removing wax, lignin contents. Samples of these flax and carbon fiber reinforcement composite were fabricated by compression moulding and investigation their mechanical properties and thermal properties. The work of this experimental study has been carried out to determine the mechanical properties and thermal conductivity due to the effect of flax & carbon fiber fabrics. The results of this study indicates the thermal conductivity in flax/carbon fibers reinforced composites is better than the pure carbon fiber reinforced composite polymer and as well as had a better mechanical properties like tensile, flexural, impact, compression and SEM analysis.


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DESIGN AND FABRICATION OF BORING JIG



PROJECT REPORT

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ABSTRACT

Design and analysis of jigs and fixtures for manufacturing process. For this project, it is focus on the perspective of the job handling to produce the part. Currently, they implement the manual handling to assembly each component. Improvement that is trying to do is by replace the manual handling for the process by designing the semi auto boring jig for this process. The objectives of this project are to investigate the collected data and analyst is the design of jig and fixture to ease work handling. The methodology of research procedures covered on this project consists of collect data, brainstorming and interprets data, design concept, and documentation. The design of jig and fixtures is using CATIA software.


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DESIGN & ANALYSIS OF REAR SPOILERS IN CARS



A Project Report

Submitted by

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Chapter-1

ABSTRACT

Aerodynamic characteristics of a racing car are of significant interest in reducing car-racing accidents due to wind loading and in reducing the fuel consumption. At the present, modified car racing becomes more popular around the world. Sports cars are most commonly seen with spoilers.

One of the design goals of a spoiler is to reduce drag and increase fuel efficiency. Many vehicles have a fairly steep downward angle going from the rear edge of the roof down to the trunk or tail of the car. Air flowing across the roof tumbles over this edge at higher speeds, causing flow separation. The flow of air becomes turbulent and a low-pressure zone is created, thus increases drag. Adding a spoiler at the very rear of the vehicle makes the air slice longer, gentler slope from the roof to the spoiler, which helps to reduce the flow separation. Reducing flow separation decreases drag, which increases fuel economy; it also helps keep the rear window clear because the air flows smoothly through the rear window.

The limitations of conventional wind tunnel experiment and rapid developments in computer hardware, considerable efforts have been invested in the last decade to study vehicle aerodynamics computationally. This thesis will present a numerical simulation of flow around a sedan car with spoiler positioned at the rear end using commercial fluid dynamic software ANSYS FLUENT®. The Thesis will focus on evaluating if aerodynamic drag on a sedan can be reduced using Rear spoilers using CFD. A 3D computer model of 4-door sedan car is designed with commercial software SolidWorks® and will be used as the base model. Different 3D models of spoilers will be positioned at the rear end of sedan and the simulation will be run in order to determine the aerodynamic effects of the spoiler.




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DESIGN AND FABRICATION OF BRIQUETTES MACHINE



A Project Report

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In partial fulfillment for the award of the degree

Of

BACHELOR OF ENGINEERING

in

MECHANICAL ENGINEERING

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY

COIMBATORE - 641 105

ANNA UNIVERSITY: CHENNAI 600 025



JULY- 2022


PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

Chapter-1

ABSTRACT

The study presents a detailed design study of the new briquetting machine called hybrid biomass briquetting machine. Briquetting of the saw dust represents one of the possible solutions to the local energy shortages in many developing countries. Briquetting of the saw dust represents one of the possible solutions to the local energy shortages in many developing countries. It constitutes a positive solution to the problem of increasing rates of desertification in many areas worldwide. The production cost was found to be lower due to the lower binder requirement for the new machine, which is lower by about 65%. The initial moisture content of the feed stock required for this machine is lower by about 30 % compared to the best alternative, which results in shorter drying time for the fuel briquettes produced. The quality of the produced briquettes was found to be better and of lower smoke generation when burned due to the lower binder content .

device is simple and comfortable. Basic calculation, drawing, designing is included in the project . The salient features of our machine can be listed as the mechanism used is very simple, easy for operation; no skill is required to operate the machine.


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JCT College of Engineering and Technology
RICHANUR, COMBATURE - 641 105.





DEVELOPMENT OF JACKFRUIT PEEL WASTE AS BIOMASS ENERGY



A PROJECT REPORT

Submitted by

K.SRIDHAR (720918114034)

S. VIGNESH (720918114041)

P. PUGAZHENTHI (720918114048)

TOMCY ROY (720918114304)

In partial fulfillment of the award of the degree

Of

BACHELOR OF ENGINEERING

in

MECHANICAL ENGINEERING

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY

COIMBATORE-641105

ANNA UNIVERSITY: CHENNAI- 600 025

JUNE-2022


PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

ABSTRACT

Briquette quality is evaluated mainly by briquette density. Briquette density is very important from the view of point of manipulation, burning speed, briquette durability, etc. The present study deals with the determination of physical and combustion characteristics like length, diameter, mass, density, moisture content, total ash content, fixed carbon, volatile matter, gross calorific values (as on basis & on dry basis) of Sawdust briquettes and jack fruit peel . During our research theoretical analyses of parameters which have an impact on briquette quality were conducted. For quality evaluation of the manufactured briquette, the density and strength properties were determined. To determine the calorific value and proximate analyses of briquettes using the test carried out in universal electro hydraulic machines, Pollachi, Coimbatore ., and analyses the result in graphical representation.

KEY WORDS

Saw dust and jack fruit peel, Moisture content, volatile matter, fixed carbon, Total Ash content, Gross Calorific Value.



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JCT College of Engineering and Technology
PICCHANUR, COIMBATORE - 641 105.



HYDRAULIC INBULIT JACK IN AUTOMOTIVE VEHICLE



A PROJECT REPORT

Submitted by

SIVALAL M 720918114032

VISAKH MS 720918114043

ANANDU K 720918114301

ANSON AA 720918114302

In partial fulfillment for the award of the degree

of

BACHELOR OF ENGINEERING

In

MECHANICAL ENGINEERING

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY

ANNA UNIVERSITY : CHENNAI 600 025

JUNE 2022




PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

ABSTRACT

This project work titled “ **HYDRAULIC INBUILT JACK IN AUTOMOTIVE VEHICLES** ” has been conceived having studied the difficulty in lifting any type of four wheeler vehicles. Our survey in the regard in several automobile garages, revealed the facts that mostly some difficult methods were adopted in lifting the vehicles for reconditioning. Now the project has mainly concentrated on this difficulty, and hence a suitable electronic control unit has been designed such that the vehicles can be lifted from the floor land without application of any impact force. By pressing the button in the dashboard, the electronic control unit activates the corresponding hydraulic jack automatically. The fabrication part of it has been considered with almost ease for its simplicity and economy, such that this can be accommodated as one of the essential tools on automobile garages. The subsequent chapter indicates all the essential features of its fabrication and its application




PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.



PROJECT REPORT

Submitted by

ABHINAND KRISHNA 720918114002

RAHUL PS **720918114028**

VISHNNU M **720918114044**

RITHIN PRAVEEN 720918114901

In partial fulfilment for the award of the degree

of

BACHELOR OF ENGINEERING

in

MECHANICAL ENGINEERING

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY

PICHANUR, COIMBATORE – 641105

ANNA UNIVERSITY: CHENNAI 600 025

June 2022



I

PRINCIPAL
JIT Industries, Inc. and Technology
FACHATON, N.J. WORK ONE - 641 105.

1.ABSTRACT

This project work titled “**DESIGN AND FABRICATION OF FOOD WASTE COMPOST MACHINE**” Organic waste and especially Food waste is a worldwide problem, it cost to be disposed and nothing is gained from it, on the contrary, it causes the emission of harmful gases such as methane. These food waste forms bacteria which results in unhealthy environment. So in order to make the scenario to our benefit we recycle them to compost. In India 40 percent of the garbage is a food waste. One of the major problems that faces Saudi Arabia nowadays is that there are no serious moves towards solving the food waste issue. In 2030 vision, one of their targets is to focus on the pollution and the causes of it. Composting has proven to be a valid solution to this problem but not entirely explored. The objectives of this project are to design a composting machine with certain parameters for the design, Process time, Easy to use, odourless and power saving. The designed food waste decomposition system is designed for rapid composting performance. It can be used by households, restaurants, hotels, schools, apartment buildings, communities, offices and cafeterias depending on the capacity of the machine.

Keywords: Organic, Composting, decomposition





**PHYSICAL AND FUEL
CHARACTERISTICS OF BRIQUETTES
PRODUCED FROM KURUMTHOTTI
HERBAL**



A PROJECT REPORT

Submitted by

JASWIN JAYAKUMAR 720918114018

MOHAMMED SAHAL .J 720918114020

MUHAMMED SHAFAS. K.A 720918114022

PINJOFFER F THEKKENATH 720918114024

in partial fulfilment of the award of the degree

of

BACHELOR OF ENGINEERING

in

MECHANICAL ENGINEERING



JCT COLLEGE OF ENGINEERING AND TECHNOLOGY

COIMBATORE

ANNA UNIVERSITY: CHENNAI- 600 025

JULY 2022

PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

ABSTRACT

Briquette quality is evaluated mainly by briquette density. Briquette density is very important from the point of point of manipulation, burning speed, briquette durability, etc. The present study deals with the determination of physical and combustion characteristics like length, diameter, mass, density, moisture content, total ash content, fixed carbon, volatile matter, gross calorific values (as on basis & on dry basis) of Sawdust briquettes and kurumthotti. During our research theoretical analyses of parameters which have an impact on briquette quality were conducted. For quality evaluation of the manufactured briquette, the density and strength properties were determined. To determine the calorific value and proximate analyses of briquettes using the test carried out in universal electro hydraulic machines, pollachi, Coimbatore, and analyses the result in graphical representation.

KEY WORDS

Sawdust and kurumthotti, Moisture content, volatile matter, fixed carbon, Total Ash content, Gross Calorific Value.




PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.



INTELLIGENT ACTIVE SUSPENSION SYSTEM FOR TWO WHEELER

A PROJECT REPORT

submitted by

ARUN PK 720918114013

ALTHAF A 720918114007

HASHIM SK 720918114016

VISHNU KP 720918114045

In partial fulfillment for the award of the degree

of

BACHRLOR OF ENGINEERING

in

MECHANICAL ENGINEERING

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY

ANNA UNIVERSITY : CHENNI 600025

JUNE 2022



I

PRINCIPAL

JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

CHAPTER-1

ABSTRACT

A shock absorber is a mechanical device designed to smooth out or (A slight wetness) damp a sudden shock impulse and dissipate kinetic energy. Now the project has mainly concentrated a suitable suspension unit has been designed. The limit sensor is fixed to the front wheel. When the front wheel is jumping, the limit sensor activates the hydraulic pump automatically starts running and activates the hydraulic suspensor which is fitted in the back wheel.

In a vehicle, it reduces the effect of traveling over rough ground. Without shock absorbers, the vehicle would have a bouncing ride, as energy is stored in the spring and then released to the vehicle, possibly exceeding the allowed range of suspension movement. Control of excessive suspension movement without shock absorption requires stiffer (higher rate) springs, which would in turn give a harsh ride. Shock absorbers allow the use of soft (lower rate) springs while controlling the rate of suspension movement in response to bumps. In our project, pneumatically operated suspensor is used to reduce the effect of traveling over rough ground. This system consists of pneumatic suspensor, compressed air and solenoid valve. Shock absorbers are an important part of (2-wheeled motor vehicle; usually propelled by an internal combustion engine) automobile (A mixture in which fine particles are suspended in a fluid where they are supported by buoyancy) suspensions.




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JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

CHAPTER 1

INTRODUCTION

The solar-powered street light works on the principle of solar cells or PV cells to absorb solar energy in the daytime. The PV cells convert solar energy to the electrical energy. The converted energy is stored in the battery and the solar street lights use solar energy. Nowadays solar street lights are available beside the roads. At night time, the lamps start automatically and it uses the electrical energy which is stored in the battery. Every day this process continues. Light-emitting diode comprises of the chemical compound. When the direct current from the battery passes through the light, then it gives the light. Solar LEDs are available in different shapes, styles, and sizes. Generally, the life span of the light-emitting diode is very high and it requires very little current.




PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COMBAY ONE - 641 105.



**DESIGN AND FABRICATION OF
AUTOMOTIVE HYDRAULIC
JACK WITH CRANK MECHANISM**



A Project Report

ABHIJITH P 720919114001

NIKHIL RAJ P 720919114012

VINEETH S 720919114020

*In partial fulfillment for the award of the degree
of*

BACHELOR OF ENGINEERING

In

MECHANICAL ENGINEERING

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY

COIMBATORE- 641105

ANNA UNIVERSITY: CHENNAI 600025

JULY 2022



CHAPTER-1

ABSTRACT

Hydraulic jacks depend on this basic principle to lift heavy loads: they use pump plungers to move oil through two cylinders. The plunger is first drawn back, which opens the suction valve ball within and draws oil into the pump chamber. As the plunger is pushed forward, the oil moves through an external discharge check valve into the cylinder chamber, and the suction valve closes, which results in pressure building within the cylinder.

The objective of the paper is to convert mechanically operated hydraulic jack into electrically operated jack by means of a motor and a crank mechanism. In a hydraulic jack, that pump is operated by a lever. The lever operation is done manually, in this project the manual operation of the lever is eliminated by a crank mechanism driven by an electric motor. The power required for the motor is taken from the 12 volt battery of the car its


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JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105




DESIGN AND FABRICATION OF DUAL SIDE SHAPER MACHINE



A PROJECT REPORT

Submitted by

CHANDAN KUMAR 720919114034

RITIK KUMAR RAM 720919114023

In partial fulfillment of the award of the degree

Of

BACHELOR OF ENGINEERING

In

MECHANICAL ENGINEERING

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

ANNA UNIVERSITY: CHENNAI- 600 025



JULY 2022

[Signature]
PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

ABSTRACT

Most of the industries are having a various types of reciprocating machines for performing machine operation on small size of work. Usually shaper, broaching machine and planner are used for machining a small area of work with less quantity. These machines are used for machining very small area of plain surface, vertical surface, angular surface, grooving etc. It removes the materials from job only at forward stroke. So it takes more machining time to complete the product. In order to overcome this problem, a small dual shaper machine is developed for machining two work pieces at a same time. In this machine, it has both the direction of ram movement and it removes a material from two work pieces simultaneously. So, the machining time will be reduced and the production rate will be increased.

KEY WORDS

Shaper, Dual side shaper, Machining Centre



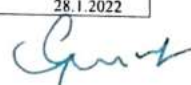
A handwritten signature in blue ink, appearing to be 'JCT' followed by a stylized flourish.

JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

List of Students Internship Visit during the year of 2021-2022

Sl. No.	Title of the collaborative activity	Name of the collaborating agency with contact details	Name of the participant	Year of collaboration	Duration
1	Internship	NSK BEARINGS INDIA PRIVATE LIMITED,	Ninal Varghese V	2021-22	2.1.2022 to 10.1.2022
2	Internship	NSK BEARINGS INDIA PRIVATE LIMITED,	Madhav R Nair	2021-22	2.1.2022 to 10.1.2022
3	Internship	NSK BEARINGS INDIA PRIVATE LIMITED,	Shibu T K	2021-22	2.1.2022 to 10.1.2022
4	Internship	NSK BEARINGS INDIA PRIVATE LIMITED,	Sujil G	2021-22	2.1.2022 to 10.1.2022
5	Internship	NSK BEARINGS INDIA PRIVATE LIMITED,	Umesh M	2021-22	2.1.2022 to 10.1.2022
6	Internship	NSK BEARINGS INDIA PRIVATE LIMITED,	Vignesh R	2021-22	2.1.2022 to 10.1.2022
7	Internship	Best Heat Treatment services	Pramob K Prasad	2021-22	06.07.2021 to 16.07.2021
8	Internship	Best Heat Treatment services	praveen S	2021-22	06.07.2021 to 16.07.2021
9	Internship	Best Heat Treatment services	Vimal Gladin R	2021-22	06.07.2021 to 16.07.2021
10	Internship	Best Heat Treatment services	Gagan Kumar Sansi G	2021-22	06.07.2021 to 16.07.2021
11	Internship	Best Heat Treatment services	Joel P	2021-22	06.07.2021 to 16.07.2021
12	Internship	Best Heat Treatment services	Monesh J	2021-22	06.07.2021 to 16.07.2021
13	Internship	Ashok Leyland	anshad V A	2021-22	11.06.2021 to 18.06.2021
14	Internship	Ashok Leyland	Nived Ab	2021-22	11.06.2021 to 18.06.2021
15	Internship	Ashok Leyland	M Prabhu	2021-22	11.06.2021 to 18.06.2021
16	Internship	Ashok Leyland	Mirunalan M	2021-22	11.06.2021 to 18.06.2021
17	Internship	Ashok Leyland	Abinandh C C	2021-22	11.06.2021 to 18.06.2021
18	Internship	Ashok Leyland	Steffin Stephen T	2021-22	11.06.2021 to 18.06.2021
19	Internship	Bull Machines Pvt Ltd	Sankeerth Sivam	2021-22	2.1.2022 to 10.1.2022
20	Internship	Bull Machines Pvt Ltd	Jithin Moorthy N	2021-22	2.1.2022 to 10.1.2022
21	Internship	Bull Machines Pvt Ltd	Dhilmath KS	2021-22	2.1.2022 to 10.1.2022
22	Internship	Bull Machines Pvt Ltd	Avdresh Kumar	2021-22	2.1.2022 to 10.1.2022
23	Internship	Bull Machines Pvt Ltd	Akash S	2021-22	2.1.2022 to 10.1.2022
24	Internship	Bull Machines Pvt Ltd	santosh Kumar	2021-22	2.1.2022 to 10.1.2022
25	Internship	ACC Limited	suresh D	2021-22	06.07.2021 to 16.07.2021
26	Internship	ACC Limited	Vikash Kumar Bittu	2021-22	06.07.2021 to 16.07.2021
27	Internship	ACC Limited	Akash S	2021-22	06.07.2021 to 16.07.2021
28	Internship	ACC Limited	Adharsh T K	2021-22	06.07.2021 to 16.07.2021
29	Internship	ACC Limited	Sakthi B	2021-22	06.07.2021 to 16.07.2021
30	Internship	ACC Limited	MD Ashique Babu	2021-22	06.07.2021 to 16.07.2021
31	Internship	Hirotec India Pvt Ltd	Lakshmi K R	2021-22	19.1.2022 to 28.1.2022
32	Internship	Hirotec India Pvt Ltd	sanjeet Kumar	2021-22	19.1.2022 to 28.1.2022
33	Internship	Hirotec India Pvt Ltd	karan M	2021-22	19.1.2022 to 28.1.2022
34	Internship	Hirotec India Pvt Ltd	Kannan S	2021-22	19.1.2022 to 28.1.2022


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 JCT College of Engineering and Technology
 PICHANUR, COIMBATORE - 641 105.


HOD/MECH

HEAD OF THE DEPARTMENT
 Department of Mechanical Engineering
 JCT College of Engineering & Technology
 Coimbatore - 641 105.



Date: 08-12-2021

To,

Mr. Sivakumar V

DGM – HR & General Affairs

NSK Bearings India Private Limited

Dear Sir,

Sub: Internship opportunity -Reg.

Greetings from JCT College of Engineering and Technology!

I would like to seek your kind patronage in providing internship opportunity to our Mechanical Engineering students. It will be a great exposure for them to gain industrial and hands on experience.

We request you to kindly share the availability schedule at an early date

Thanking you,

PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 107.

Principal

JCT College of Engineering and Technology

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

Coimbatore, Coimbatore-641 107 Email: info@jct.ac.in Phone: +91 422 2535901 Fax: +91 422 2535901 Email: info@jct.ac.in www.jct.ac.in

NSK

14th December 2022
Kancheepuram

INTERNSHIP ACCEPTANCE LETTER

Based on your request, we are ready to offer internship opportunity to 6 students of mechanical Engineering, for the period from 2.01.2022 to 10.01.2022 in Our company at Kancheepuram. During the internship, the students have to abide by our rules and regulations

For NSK Bearings India Pvt. Ltd.,



Sivakumar V

DGM – HR & General Affairs

NSK Bearings India Private Limited (Formerly NSK India Sales Company Private Limited)

Registered Office: TVH Belicia Towers, 2nd Floor, Block 1, No .71/1, MRC Nagar Main Road, MRC Nagar, Chennai – 600028, India.

Works: Plot No.A2, SIPCOT Oragadam Growth Centre, Mathur Village, Sriperumbudur Taluk, Kancheepuram District, Tamilnadu – 602105 India

(CIN No. U29130TN2007PTC064307 / PAN AACCN5663R / GST No.: 33AACCN5663R1ZW) Web: www.nsk.com



NSK

11th January 2022
Kancheepuram

TO WHOMSOEVER IT MAY CONCERN

We wish to inform you that, Mr. Nimal Varghese V, has successfully completed his internship with our organisation from 2.01.2022 to 10.01.2022.

During this period of internship he has shown great enthusiasm in understanding the functioning of the Manufacturing Department and its functions.

We wish him all success in his future endeavours!

For NSK Bearings India Pvt. Ltd.,



Sivakumar V

DGM – HR & General Affairs

NSK Bearings India Private Limited (Formerly NSK India Sales Company Private Limited)

Registered Office: TVM Bellissa Towers, 2nd Floor, Block 1, No. 71/1, MRC Nagar Main Road, MRC Nagar, Chennai - 600028, India

Works: Plot No. A2, SIPCOT Oragadam Growth Centre, Mather Village, Sriperumbudur Taluk, Kancheepuram District, Tamilnadu - 602105, India

(CIN No. U29130TN2007PTC064307 / PAN AACC N5663R / GST No. 31AAC N5663R12W) Web: www.nsk.com

NSK

11th January 2022
Kancheepuram

TO WHOMSOEVER IT MAY CONCERN

We wish to inform you that, Mr. Madhav R Nair, has successfully completed his internship with our organisation from 2.01.2022 to 10.01.2022.

During this period of internship he has shown great enthusiasm in understanding the functioning of the Manufacturing Department and its functions.

We wish him all success in his future endeavours!

For NSK Bearings India Pvt. Ltd.,



Sivakumar V

DGM – HR & General Affairs



NSK

11th January 2022
Kancheepuram

TO WHOMSOEVER IT MAY CONCERN

We wish to inform you that, Mr. Shibu T K, has successfully completed his internship with our organisation from 2.01.2022 to 10.01.2022.

During this period of internship he has shown great enthusiasm in understanding the functioning of the Manufacturing Department and its functions.

We wish him all success in his future endeavours!

For NSK Bearings India Pvt. Ltd.,

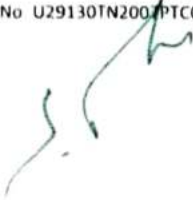


Sivakumar V

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Works: Plot No A2, SIPCOT Oragadam Growth Centre, Mathur Village, Sriperumbudur Taluk, Kancheepuram District, Tamilnadu – 602105 India
(CIN No : U29130TN2000PTC064307 / PAN AACCN5663R / GST No : 33AACCN5663R1ZW) Web: www.nsk.com



NSK

11th January 2022
Kancheepuram

TO WHOMSOEVER IT MAY CONCERN

We wish to inform you that, Mr. Sujil G, has successfully completed his internship with our organisation from 2.01.2022 to 10.01.2022.

During this period of internship he has shown great enthusiasm in understanding the functioning of the Manufacturing Department and its functions.

We wish him all success in his future endeavours!

For NSK Bearings India Pvt. Ltd.,



Sivakumar V

DGM – HR & General Affairs



NSK

11th January 2022
Kancheepuram

TO WHOMSOEVER IT MAY CONCERN

We wish to inform you that, Mr. Umesh M, has successfully completed his internship with our organisation from 2.01.2022 to 10.01.2022.

During this period of internship he has shown great enthusiasm in understanding the functioning of the Manufacturing Department and its functions.

We wish him all success in his future endeavours!

For NSK Bearings India Pvt. Ltd.,



Sivakumar V

DGM – HR & General Affairs

NSK Bearings India Private Limited (Formerly NSK India Sales Company Private Limited)

Registered Office: TVH Beligaa Towers, 2nd Floor, Block 1, No. 71/1, MRC Nagar Main Road, MRC Nagar, Chennai – 600028, India.

Works: Plot No.A2, SIPCOT Oragadam Growth Centre, Mathur Village, Sriperumbudur Taluk, Kancheepuram District, Tamilnadu – 602105 India

(CIN No. U29130TN2007PTC064307 / PAN AACCN5663R / GST No.: 33AACCN5663R1ZW) Web: www.nsk.com



NSK

11th January 2022

Kancheepuram

TO WHOMSOEVER IT MAY CONCERN

We wish to inform you that, Mr. Vignesh R, has successfully completed his internship with our organisation from 2.01.2022 to 10.01.2022.

During this period of internship he has shown great enthusiasm in understanding the functioning of the Manufacturing Department and its functions.

We wish him all success in his future endeavours!

For NSK Bearings India Pvt. Ltd.,



Sivakumar V

DGM – HR & General Affairs





JCT
COLLEGE OF ENGINEERING
AND TECHNOLOGY

Date: 29-06-2021

To,

M Mugilan

Asst. Manager- HRD

Best Heat Treatment Services

Coimbatore

Dear Sir,

Sub: Internship opportunity -Reg.

Greetings from JCT College of Engineering and Technology!

I would like to seek your kind patronage in providing internship opportunity to our Mechanical Engineering students. It will be a great exposure for them to gain industrial and hands on experience.

We request you to kindly share the availability schedule at an early date

Thanking you,



[Signature]

Principal

JCT College of Engineering and Technology

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

PRINCIPAL

JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

Address: Coimbatore-641 105 Tamil Nadu INDIA. Phone: +91 422 2535301 Fax: +91 422 2535301 Email: info@jct.ac.in www.jct.ac.in



Best Heat Treatment Services

53, SIDCO INDUSTRIAL ESTATE, COIMBATORE - 641 021.
Ph. : 0422 - 4205600, 4205666 FAX : 0422 - 2679954
E-mail : adm@bestheatreatment.com / vigneshbhts@gmail.com
Web : bestheatreatment.com



BHTS: PD: 21-22

02.07.2021

INTERNSHIP ACCEPTANCE LETTER

We are pleased to give accept your internship request for your Mechanical Engineering students. They can join the Internship training in our organization during the period from 06.07.2021 to 16.07.2021. During the internship they have to follow the rules and regulations of the company.

We wish him best wishes in future endeavors.

Thanks & Regards

M. Mugilan
Asst. Manager-HRD
Best Heat Treatment Services
#53, Sidco Industrial Estate
Coimbatore- 641021



Infrastructure : Gas Carburising, Carbonitriding, Hardening and Tempering, All types of Annealing, Normalising, Stress Relieving
Aluminium Solution & Precipitation, Liquid Nitriding, Gas Nitriding, Induction Hardening MF, HF & RF and Sub Zero Treatment

Specialty : SEALED QUENCH FURNACE, FNC & METALLURGICAL LABORATORY

PRINCIPAL

JCT College of Engineering & Technology
PICHANUR COIMBATORE - 641 105.



Best Heat Treatment Services
53, SIDCO INDUSTRIAL ESTATE, COIMBATORE - 641 021.
Ph : 0422 - 4205600, 4205666 FAX : 0422 - 2679954
E-mail : admn@bestheattreatment.com / vigneshbhts@gmail.com
Web : bestheattreatment.com



BHTS: PD: 21-22

17.07.2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Pramob K Prasad (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from **06.07.2021 to 16.07.2021**.

We wish him best wishes in future accomplishments.

Thanks & Regards

M. Mugilan
Asst. Manager-HRD
Best Heat Treatment Services
#53, Sidco Industrial Estate
Coimbatore- 641021



Infrastructure : Gas Carburising, Carbonitriding, Hardening and Tempering, All types of Annealing, Normalising, Stress Relieving
Aluminium Solution & Precipitation, Liquid Nitriding, Gas Nitriding, Induction Hardening MF, HF & RF and Sub Zero Treatment

Specialty : SEALED QUENCH FURNACE, FNC & METALLURGICAL LABORATORY

JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 021.



Best Heat Treatment Services

53, SIDCO INDUSTRIAL ESTATE, COIMBATORE - 641 021.
Ph. : 0422 - 4205600, 4205666 FAX : 0422 - 2679954
E-mail : admn@bestheattreatment.com / vigneshbhts@gmail.com
Web : bestheattreatment.com



BHTS: PD: 21-22

17.07.2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Praveen S (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from **06.07.2021 to 16.07.2021**.

We wish him best wishes in future accomplishments.

Thanks & Regards

M. Mugilan
Asst. Manager-HRD
Best Heat Treatment Services
#53, Sidco Industrial Estate
Coimbatore- 641021



Infrastructure : Gas Carburising, Carbonitriding, Hardening and Tempering, All types of Annealing, Normalising, Stress Relieving
Aluminium Solution & Precipitation, Liquid Nitriding, Gas Nitriding, Induction Hardening MF, HF & RF and Sub Zero Treatment

Specialty : SEALED QUENCH FURNACE, FNC & METALLURGICAL LABORATORY

PRINCIPAL

JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.



Best Heat Treatment Services

53, SIDCO INDUSTRIAL ESTATE, COIMBATORE - 641 021.
Ph. : 0422 - 4205600, 4205666 FAX : 0422 - 2679954
E-mail : admnbestheattreatment.com / vigneshbhts@gmail.com
Web : bestheattreatment.com



BHTS: PD: 21-22

17.07.2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Vimal Gladin R (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from **06.07.2021 to 16.07.2021**.

We wish him best wishes in future accomplishments.

Thanks & Regards

M. Mugilan
Asst. Manager-HRD
Best Heat Treatment Services
#53, Sidco Industrial Estate
Coimbatore- 641021



Infrastructure : Gas Carburising, Carbonitriding, Hardening and Tempering, All types of Annealing, Normalising, Stress Relieving
Aluminium Solution & Precipitation, Liquid Nitriding, Gas Nitriding, Induction Hardening MF, HF & RF and Sub Zero Treatment

Specialty : SEALED QUENCH FURNACE, FNC & METALLURGICAL LABORATORY

PRINCIPAL
JCT College of Engineering & Technology
PILANUR, COIMBATORE - 641 105



Best Heat Treatment Services

53, SIDCO INDUSTRIAL ESTATE, COIMBATORE - 641 021.
Ph. : 0422 - 4205600, 4205666 FAX : 0422 - 2679954
E-mail : admn@bestheatreatment.com / vigneshbhts@gmail.com
Web : bestheatreatment.com



BHTS: PD: 21-22

17.07.2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Gagan Kumar Sansi G (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from **06.07.2021 to 16.07.2021**.

We wish him best wishes in future accomplishments.

Thanks & Regards

M. Mugilan
Asst. Manager-HRD
Best Heat Treatment Services
#53, Sidco Industrial Estate
Coimbatore- 641021



Infrastructure : Gas Carburising, Carbonitriding, Hardening and Tempering, All types of Annealing, Normalising, Stress Relieving
Aluminium Solution & Precipitation, Liquid Nitriding, Gas Nitriding, Induction Hardening MF, HF & RF and Sub Zero Treatment

Specialty : SEALED QUENCH FURNACE, FNC & METALLURGICAL LABORATORY

JCT College of Engineering & Technology
Pichanur Industrial Estate, Coimbatore - 641 105



Best Heat Treatment Services

53, SIDCO INDUSTRIAL ESTATE, COIMBATORE - 641 021.
Ph. : 0422 - 4205600, 4205666 FAX : 0422 - 2679954
E-mail : admn@bestheattreatment.com / vigneshbhts@gmail.com
Web : bestheattreatment.com



BHTS: PD: 21-22

17.07.2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Joel P (MECHANICAL ENGINEERING) student from JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore has undergone Internship training in our organization during the period from 06.07.2021 to 16.07.2021.

We wish him best wishes in future accomplishments.

Thanks & Regards

M. Mugilan
Asst. Manager-HRD
Best Heat Treatment Services
#53, Sidco Industrial Estate
Coimbatore- 641021



Infrastructure : Gas Carburising, Carbonitriding, Hardening and Tempering, All types of Annealing, Normalising, Stress Relieving
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Specially : SEALED QUENCH FURNACE, FNC & METALLURGICAL LABORATORY

PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.



Best Heat Treatment Services

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E-mail : adm@bestheattreatment.com / vigneshbhts@gmail.com
Web : bestheattreatment.com



BHTS: PD: 21-22

17.07.2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Monesh J (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from **06.07.2021 to 16.07.2021**.

We wish him best wishes in future accomplishments.

Thanks & Regards

M. Mugilan
Asst. Manager-HRD
Best Heat Treatment Services
#53, Sidco Industrial Estate
Coimbatore- 641021



Infrastructure : Gas Carburising, Carbonitriding, Hardening and Tempering, All types of Annealing, Normalising, Stress Relieving
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Specialty : SEALED QUENCH FURNACE, FNC & METALLURGICAL LABORATORY

PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.



Date: 20-05-2021

To,

The HR

Ashok Leyland

No.1 Sardar Patel Road

Guindy, Chennai -- 600032.

Dear Sir,

Sub: Internship opportunity -Reg.

Greetings from JCT College of Engineering and Technology!

I would like to seek your kind patronage in providing internship opportunity to our Mechanical Engineering students. It will be a great exposure for them to gain industrial and hands on experience.

We request you to kindly share the availability schedule at an early date

Thanking you,


PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.





Principal

JCT College of Engineering and Technology

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

Coimbatore - 641 105. Email: info@jct.ac.in Website: www.jct.ac.in



ASHOK LEYLAND

Aapki Jeet. Hamari Jeet.

INTERNSHIP ACCEPTANCE LETTER

18-06-2021

Dear Sir,

With reference to your request, we are pleased to permit internship training for your students from **11-06-2021 to 18-06-2021**.

We hope this experience will be useful to your students to help them educate regarding on what areas our company is specialised on and gain better knowledge on the industry expectations.

Regards

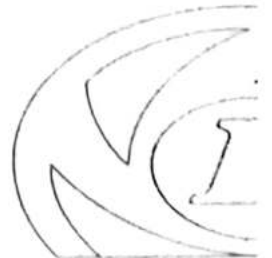



G. Ramesh

Sr. Manager – Training & Development


JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105

ASHOK LEYLAND LIMITED
175, Sipcot Industrial Complex, Hosur - 635 126, India
T: +91 4344 276631 F: +91 4344 276067
e: reachus@ashokleyland.com
Regd. Office: No 1, Sardar Patel Road, Gulindy, Chennai - 600 032, India
T: +91 44 2220 6000 F: +91 44 2220 6001
CIN: L34101TN194BPLC000105
www.ashokleyland.com





ASHOK LEYLAND

Aapki Jeet. Hamari Jeet.

18-06-2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Abinandh C C (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from 11.06.2021 to 18.06.2021.

We wish him best wishes in future endeavours.

Regards

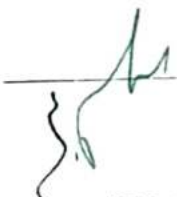

G. Ramesh

Sr. Manager – Training & Development



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e: reachus@ashokleyland.com
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PRINCIPAL
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PICHANUR, COIMBATORE - 641 105.



ASHOK LEYLAND

Aapki Jeet. Hamari Jeet.

18-06-2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Steffin Stephen T (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from 11.06.2021 to 18.06.2021.

We wish him best wishes in future endeavours.

Regards

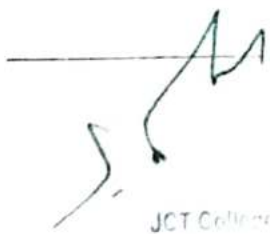

G. Ramesh

Sr. Manager – Training & Development



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JCT College of Engineering & Technology
PICHANUR - COIMBATORE - 641 105.



ASHOK LEYLAND

Aapki Jeet. Hamari Jeet.

18-06-2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Anshad V A (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from 11.06.2021 to 18.06.2021.

We wish him best wishes in future endeavours.

Regards


G. Ramesh

Sr. Manager – Training & Development




ASHOK LEYLAND LIMITED
175, Sipcot Industrial Complex, Hosur - 635 126, India
t: +91 4344 276631 f: +91 4344 276067
e: reachus@ashokleyland.com
Regd. Office: No.1, Sardar Patel Road, Guindy, Chennai - 600 032, India.
t: +91 44 2220 6000 f: +91 44 2220 6001
CIN: L34101TN1040PLC000105
www.ashokleyland.com




ASHOK LEYLAND

Aapki Jeet. Hamari Jeet.

18-06-2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Nived AB (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from 11.06.2021 to 18.06.2021.

We wish him best wishes in future endeavours.

Regards


G. Ramesh

Sr. Manager – Training & Development



ASHOK LEYLAND LIMITED

175, Sipcot Industrial Complex, Hosur - 635 126, India

T: +91 4344 276631 F: +91 4344 276067

E: reachus@ashokleyland.com

Regd. Office: No. 1, Sardar Patel Road, Guindy, Chennai - 600 032, India.

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CIN: L34101TN1948PLC000105

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JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.



ASHOK LEYLAND

Aapki Jeet. Hamari Jeet.

18-06-2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **M Prabhu (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from 11.06.2021 to 18.06.2021.

We wish him best wishes in future endeavours.

Regards


G. Ramesh

Sr. Manager – Training & Development



ASHOK LEYLAND LIMITED
175, Sipcot Industrial Complex, Hosur - 635 126, India
t: +91.4344.276631 f: +91.4344.276067
e: reachus@ashokleyland.com
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t: +91 44.2220 6000 f: +91.44.2220 6001
CIN: L34101TN1940PLC000105
www.ashokleyland.com




PRINCIPAL
JCT College of Engineering and Technology
FICHANUR, COIMBATORE - 641 105.



ASHOK LEYLAND

Aapki Jeet. Hamari Jeet.

18-06-2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mirunalan M (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from 11.06.2021 to 18.06.2021.

We wish him best wishes in future endeavours.

Regards


G. Ramesh

Sr. Manager - Training & Development



ASHOK LEYLAND LIMITED
175, Sipcol Industrial Complex, Hosur - 635 126, India
t: +91 4344 276631 f: +91 4344 276067
e: reachus@ashokleyland.com
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t: +91 44 2220 6000 f: +91 44 2220 6001
CIN: L34101TN1940PLC000105
www.ashokleyland.com




PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.



Date: 12-12-2021

To,

K.VEERA

Manager- HR

Bull Machine Pvt Ltd

Dear Sir,

Sub: Internship opportunity -Reg.

Greetings from JCT College of Engineering and Technology!

I would like to seek your kind patronage in providing internship opportunity to our Mechanical Engineering students. It will be a great exposure for them to gain industrial and hands on experience.

We request you to kindly share the availability schedule at an early date

Thanking you,

PRINCIPAL

JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.



Principal

JCT College of Engineering and Technology

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

Quabacur, Coimbatore-641 105 Tamil Nadu INDIA Phone: +91 422 2632200 Fax: +91 422 2632201 Email: info@jct.ac.in www.jct.ac.in



28.12.2021

INTERNSHIP PERMISSION LETTER

We are pleased to give accept your internship request for your Mechanical Engineering students. They can join the Internship training in our organization during the period from 2.01.2022 to 10.01.2022. During the internship they have to follow the rules and regulations of the company.

We wish him best wishes in future endeavors.

Regards

K.VEERA

Manager- HR

PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.

Bull Machines Pvt Ltd

Address: 5, 1 A, Trichy Rd, Chinthamanipudur, Coimbatore, Tamil Nadu 641103



11.01.2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Akash S (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship in our organization during the period from 2.01.2022 to 10.01.2022.

We wish him best wishes in future.

Regards

K.VEERA

Manager- HR

PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.

Bull Machines Pvt Ltd

Address: 5, 1 A, Trichy Rd, Chinthamanipudur, Coimbatore, Tamil Nadu 641103.



11.01.2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Santosh Kumar (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship in our organization during the period from 2.01.2022 to 10.01.2022.

We wish him best wishes in future.

Regards

K.VEERA

Manager- HR

Bull Machines Pvt Ltd

Address: 5, 1 A, Trichy Rd, Chinthamanipudur, Coimbatore, Tamil Nadu 641103.

PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.



11.01.2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Sankeerth Sivam (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship in our organization during the period from 2.01.2022 to 10.01.2022.

We wish him best wishes in future.

Regards

K.VEERA

Manager- HR



PRINCIPAL

JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

Bull Machines Pvt Ltd

Address: 5, 1 A, Trichy Rd, Chinthamanipudur, Coimbatore, Tamil Nadu 641103



11.01.2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Jithin Moorthy N (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship in our organization during the period from 2.01.2022 to 10.01.2022.

We wish him best wishes in future.

Regards

K.VEERA

Manager- HR



PRINCIPAL

JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

Bull Machines Pvt Ltd

Address: 5, 1 A, Trichy Rd, Chinthamanipudur, Colmbatore, Tamil Nadu 641103



11.01.2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Dhillnath KS (MECHANICAL ENGINEERING) student from JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore has undergone Internship in our organization during the period from 2.01.2022 to 10.01.2022.

We wish him best wishes in future.

Regards

K.VEERA

Manager- HR



PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

Bull Machines Pvt Ltd

Address: 5, 1 A, Trichy Rd, Chinthamanipudur, Coimbatore, Tamil Nadu 641103



11.01.2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Arvdhesh Kumar (MECHANICAL ENGINEERING) student from JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore has undergone Internship in our organization during the period from 2.01.2022 to 10.01.2022.

We wish him best wishes in future.

Regards

K.VEERA

Manager- HR



Bull Machines Pvt Ltd

Address: S, 1 A, Trichy Rd, Chinthamanipudur, Coimbatore, Tamil Nadu 641103.



Date: 01-06-2021

To,

S.SARAVANAN

Manager- HR

ACC Limited

Dear Sir,

Sub: Internship opportunity -Reg.

Greetings from JCT College of Engineering and Technology!

I would like to seek your kind patronage in providing internship opportunity to our Mechanical Engineering students. It will be a great exposure for them to gain industrial and hands on experience.

We request you to kindly share the availability schedule at an early date

Thanking you,


PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.




Principal

JCT College of Engineering and Technology

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

Chattahoochee, Coimbatore-641 105 Tamil Nadu INDIA Phone: +91 422 2552231 Fax: +91 422 2552231 Email: info@jct.ac.in www.jct.ac.in

Human Resource Development

ACC

ACC LIMITED
Madukkarai Cement Works,
P.O. Madukkarai-641105
Dist. Coimbatore (T.N)

Ph: +91 422 2265248
Fax : +91 422 2622286
www.acc-limited.com
CIN : L26940MH1936PLC002515

MK/HRD/2021-2022

28.06.2021

INTERNSHIP PERMISSION LETTER

We are pleased to give accept your internship request for your Mechanical Engineering students. They can join the Internship training in our organization during the period from 06.07.2021 to 16.07.2021. During the internship they have to follow the rules and regulations of the company.

We wish him best wishes in future endeavors.

Regards



S.SARAVANAN

Manager- HR



Registered Office: Cement House, 121, Maharishi Karve Road, Mumbai 400 020, India



JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105

Human Resource Development

ACC

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Ph: +91 422 2265248
Fax: +91 422 2622286
www.acc-limits.com
CIN : L26940MH1936PLC002515

MK/HRD/2021-2022

18.05.2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Suresh D (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from 06.07.2021 to 16.07.2021.

We wish him best wishes in future endeavors.

Regards



S.SARAVANAN

Manager- HR



Registered Office: Cement House, 121, Maharishi Karve Road, Mumbai 400 020, India



PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.

ACC

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Madhukar Cement Works,
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Dist. Coimbatore (T.N.)

Ph: +91 422 2265248
Fax: +91 422 2622286
www.acclimited.com
CIN: L26940MH1936PLC002515

MK/HRD/2021-2022

18.05.2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Vikash Kumar Bittu (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from 06.07.2021 to 16.07.2021.

We wish him best wishes in future endeavors.

Regards



S.SARAVANAN

Manager- HR



Registered Office: Cement House, 121, Maharishi Karve Road, Mumbai 400 020, India



PRINCIPAL
JCT College of Engineering and Technology
PICHANUR, COIMBATORE - 641 105.

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Madakkara Cement Works,
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Ph: +91 422 2265218
Fax: +91 422 2622286
www.acclimited.com
CIN : L26940MH1936PLC002515

MK/HRD/2021-2022

18.05.2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Akash S (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from 06.07.2021 to 16.07.2021.

We wish him best wishes in future endeavors.

Regards



S.SARAVANAN

Manager- HR



Registered Office: Cement House, 121, Maharishi Karve Road, Mumbai 400 020, India



PRINCIPAL

JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.

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Dist. Coimbatore (T.N)

Ph: +91 422 2265248
Fax : +91 422 2622286
www.acclimited.com
CIN : L26940MH1936PLC002515

MK/HRD/2021-2022

18.05.2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Adharsh T K (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from 06.07.2021 to 16.07.2021.

We wish him best wishes in future endeavors.

Regards



S.SARAVANAN

Manager- HR



Registered Office: Cement House, 121, Maharishi Karve Road, Mumbai 400 020, India



PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE-641 105.

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Dist. Coimbatore (T.N)

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Fax: +91 422 2622286
www.acc.limited.com
CIN: L26940TN11916PLC002515

MK/HRD/2021-2022

18.05.2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Sakthi B (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from 06.07.2021 to 16.07.2021.

We wish him best wishes in future endeavors.

Regards

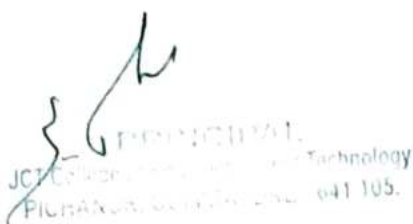


S.SARAVANAN

Manager- HR



Registered Office: Cement House, 121, Maharishi Karve Road, Mumbai 400 020, India



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Dist. Coimbatore (T.N)

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Fax : +91 422 2622286
www.acclimited.com
CIN : L26940MH1936PLC002515

MK/HRD/2021-2022

18.05.2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Anburaja M (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from 06.07.2021 to 16.07.2021.

We wish him best wishes in future endeavors.

Regards



S.SARAVANAN

Manager- HR



Registered Office: Cement House, 121, Maharishi Karve Road, Mumbai 400 020, India



PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641105.



Date: 03-01-2022

To,

ARJUN SHANKARA

Manager- HR

Hirotec India Private Limited

Dear Sir,

Sub: Internship opportunity -Reg.

Greetings from JCT College of Engineering and Technology!

I would like to seek your kind patronage in providing internship opportunity to our Mechanical Engineering students. It will be a great exposure for them to gain industrial and hands on experience.

We request you to kindly share the availability schedule at an early date

Thanking you,

PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.

Principal

JCT College of Engineering and Technology

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

Coimbatore - 641 105 Pichanur (INDIA) Phone: +91 422 2632200 Fax: +91 422 2632201 Email: info@jct.ac.in www.jct.ac.in



10.01.2022

INTERNSHIP ACCEPTANCE LETTER

We are pleased to give accept your internship request for your Mechanical Engineering students. They can join the Internship training in our organization during the period from 19.01.2022 to 28.01.2022. During the internship they have to follow the rules and regulations of the company.

We wish him best wishes in future endeavors.

Regards

Regards

A handwritten signature in black ink, appearing to read 'ARJUN'.

ARJUN SHANKARA

Manager- HR

Hirotec India Private Limited - Coimbatore

7/147, W Power House Rd, Keeranatham Post, Saravanampatti, Coimbatore, Tamil Nadu 641035, India

A handwritten signature in black ink, appearing to be a stylized 'J' or 'K' followed by a flourish.

PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.



28.01.2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **LAKSHMI K R (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from **19.01.2022 to 28.01.2022**.

We wish him best wishes in future accomplishments.

Regards

A handwritten signature in black ink, appearing to be 'ARJUN'.

ARJUN SHANKARA

Manager- HR

Hirotec India Private Limited - Coimbatore

7/147, W Power House Rd, Keeranatham Post, Saravanampatti, Coimbatore, Tamil Nadu 641035, India

A handwritten signature in black ink, appearing to be 'S. S. S.'.

PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.

28.01.2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **SANJEET KUMAR (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from **19.01.2022 to 28.01.2022.**

We wish him best wishes in future accomplishments.

Regards



ARJUN SHANKAR.A

Manager- HR

Hirotec India Private Limited - Coimbatore

7/147, W Power House Rd, Keeranatham Post, Saravanampatti, Coimbatore, Tamil Nadu 641035, India



PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, COIMBATORE - 641 105.



28.01.2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **KARAN M (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from **19.01.2022 to 28.01.2022**.

We wish him best wishes in future accomplishments.

Regards

A handwritten signature in black ink, appearing to read 'Arjun Shankar.A'.

ARJUN SHANKAR.A

Manager- HR

Hirotec India Private Limited - Coimbatore

7/147, W Power House Rd, Keeranatham Post, Saravanampatti, Coimbatore, Tamil Nadu 641035, India

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke.



28.01.2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **KANNAN S (MECHANICAL ENGINEERING)** student from **JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore** has undergone Internship training in our organization during the period from **19.01.2022 to 28.01.2022**.

We wish him best wishes in future accomplishments.

Regards

A handwritten signature in black ink, appearing to be 'Arjun' followed by a stylized surname.

ARJUN SHANKARA

Manager- HR

Hirotec India Private Limited - Coimbatore

7/147, W Power House Rd, Keeranatham Post, Saravanampatti, Coimbatore, Tamil Nadu 641035, India

A handwritten signature in green ink, consisting of several loops and a long horizontal stroke.