



(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI)

S.P.G.Chidambara Nadar - C.Nagammal Campus

S.P.G.C. Nagar, K.Vellakulam – 625 701 (Near VIRUDHUNAGAR).

**EE8811 : Project Work**

**End Semester Practical Examination March 2023**

**Venue: Power System Simulation Laboratory Date : 24-Mar-2023 Branch / Class : IV EEE Name of the Project Coordinator : Dr. B. Gurukarthik Babu**

S. No.	Roll Number	Register Number	Name of the Student	Title of the Project	Name of the Supervisor	Batch No.	Time
1	19UEEE012	920419105015	Sri Anantha Seshan.K.M	Performance improvement of various balance of systems in solar photovoltaic power plant	Dr. D. Prince Winston	1	09.20 AM to 09.30 AM
2	19UEEE023	920419105308	Sakthisundar P	Performance improvement of various balance of systems in solar photovoltaic power plant	Dr. D. Prince Winston	1	09.20 AM to 09.30 AM
3	19UEEE032	920419105309	Vignesh Pandian.P	Performance improvement of various balance of systems in solar photovoltaic power plant	Dr. D. Prince Winston	1	09.20 AM to 09.30 AM
4	19UEEE002	920419105002	Anavartha Raj.M	Addressing power quality issues in grid connected solar PV system using machine learning algorithm	Dr. S. Kalyani	2	09.30 AM to 09.40 AM
5	19UEEE014	920419105011	Puruchothaman.K	Addressing power quality issues in grid connected solar PV system using machine learning algorithm	Dr. S. Kalyani	2	09.30 AM to 09.40 AM
6	19UEEE015	920419105006	Dheeraj Kumar.P	Addressing power quality issues in grid connected solar PV system using machine learning algorithm	Dr. S. Kalyani	2	09.30 AM to 09.40 AM
7	19UEEE027	920419105302	Arun Karthick	Addressing power quality issues in grid connected solar PV system using machine learning algorithm	Dr. S. Kalyani	2	09.30 AM to 09.40 AM

8	19UEEE004	920419105008	Jeenath.R	Smart Battery management system using IOT	Dr. M. Sudalaimani	3	09.40 AM to 09.50 AM
9	19UEEE005	920419105003	Arun Balaji.N.M	Smart Battery management system using IOT	Dr. M. Sudalaimani	3	09.40 AM to 09.50 AM
10	19UEEE019	920419105019	Vignesh.S	Smart Battery management system using IOT	Dr. M. Sudalaimani	3	09.40 AM to 09.50 AM
11	19UEEE009	920419105013	Sankarasathasivam.M	Experimental Investigation of Building Integrated Solar Photovoltaic Array with Different Interconnection Patterns	Dr. B. Gurukarthik Babu	4	09.50 AM to 10.00 AM
12	19UEEE016	920419105004	Benjamin Deva Sakayam.S	Experimental Investigation of Building Integrated Solar Photovoltaic Array with Different Interconnection Patterns	Dr. B. Gurukarthik Babu	4	09.50 AM to 10.00 AM
13	19UEEE030	920419105303	Dhanabal.A	Experimental Investigation of Building Integrated Solar Photovoltaic Array with Different Interconnection Patterns	Dr. B. Gurukarthik Babu	4	09.50 AM to 10.00 AM
14	19UEEE001	920419105009	Natesh Vel.R	Two phase to three phase converter for pumping in Agriculture	Dr. D. Mariappan	5	10.00 AM to 10.10 AM
15	19UEEE010	920419105001	Abiseak Kumar.S	Two phase to three phase converter for pumping in Agriculture	Dr. D. Mariappan	5	10.00 AM to 10.10 AM
16	19UEEE028	920419105305	Harikrishnan.S	Two phase to three phase converter for pumping in Agriculture	Dr. D. Mariappan	5	10.00 AM to 10.10 AM
17	19UEEE011	920419105014	Shalini.S	Experimental Investigation of Floating type Solar Photovoltaic Panels in various water bodies	Mr. R. Ganesan	6	10.10 AM to 10.20 AM
18	19UEEE013	920419105012	Samyuktha.J	Experimental Investigation of Floating type Solar Photovoltaic Panels in various water bodies	Mr. R. Ganesan	6	10.10 AM to 10.20 AM



19	19UEEE020	920419105007	Jayashree.S	Experimental Investigation of Floating type Solar Photovoltaic Panels in various water bodies	Mr. R. Ganesan	6	10.10 AM to 10.20 AM
20	18UEEE016	920418105026	Nijanthan R	Performance Investigation of Bifacial Solar Photovoltaic Module Installed with Single Axis Tracking System	Mr. K. Ganesan	7	10.20 AM to 10.30 AM
21	19UEEE017	920419105017	Sujeeth Kumar.S	Performance Investigation of Bifacial Solar Photovoltaic Module Installed with Single Axis Tracking System	Mr. K. Ganesan	7	10.20 AM to 10.30 AM
22	19UEEE024	920419105701	Dhivakar G	Performance Investigation of Bifacial Solar Photovoltaic Module Installed with Single Axis Tracking System	Mr. K. Ganesan	7	10.20 AM to 10.30 AM
23	19UEEE025	920419105307	Prakash Raj M	Performance Investigation of Bifacial Solar Photovoltaic Module Installed with Single Axis Tracking System	Mr. K. Ganesan	7	10.20 AM to 10.30 AM
24	19UEEE018	920419105016	Sudharsan.K	Portable ball throwing machine	Mr. S. Jegan	8	10.30 AM to 10.40 AM
25	19UEEE021	920419105018	Suriya Prasath.L	Portable ball throwing machine	Mr. S. Jegan	8	10.30 AM to 10.40 AM
26	19UEEE008	920419105005	Deepak Ramji.S	Fabrication of Natural dye extractor	Mr. T. Hari Prasath	9	10.40 AM to 10.50 AM
27	19UEEE022	920419105304	Hariharan A	Fabrication of Natural dye extractor	Mr. T. Hari Prasath	9	10.40 AM to 10.50 AM
28	19UEEE029	920419105306	Marimuthu.G	Fabrication of Natural dye extractor	Mr. T. Hari Prasath	9	10.40 AM to 10.50 AM



**Staff In Charge**



**HOD/EEE**

# PERFORMANCE IMPROVEMENT OF VARIOUS BALANCE OF SYSTEMS IN SOLAR PHOTOVOLTAIC POWER PLANT

A PROJECT REPORT

*Submitted by*

SRI ANANTHA SESHAN KM (920419105015)

SAKTHI SUNDAR P (920419105308)

P.VIGNESH PANDIAN (920419105309)

*In partial fulfillment for the award of the degree of*



**BACHELOR OF ENGINEERING IN  
ELECTRICAL AND ELECTRONICS  
ENGINEERING**



**DEPARTMENT OF ELECTRICAL AND  
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**KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY  
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**MARCH 2023**

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**BONAFIDE CERTIFICATE**

Certified that the project report “**PERFORMANCE IMPROVEMENT OF VARIOUS BALANCE OF SYSTEMS IN SOLAR PHOTOVOLTAIC POWER PLANT**” is the bonafide work of **SRI ANANTHA SESHAN KM (920419105015), SAKTHI SUNDAR P (920419105308) & P.VIGNESH PANDIAN (920419105309)** who carried out the project work under my supervision.




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**INTERNAL EXAMINER**



**EXTERNAL EXAMINER**

# **POWER QUALITY ASSESSMENT IN GRID CONNECTED SOLAR PV USING INTERNET OF THINGS**

**A PROJECT REPORT**

*Submitted by*

**M. Anavatha Raj (920419105002)**

**P. Dheeraj Kumar (920419105006)**

**K. Puruchothaman (920419105011)**

**N. Arun Karthick (920419105302)**

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**2023 APRIL**



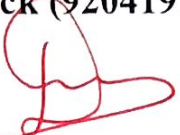
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## BONAFIDE CERTIFICATE

Certified that the project report “Power quality assessment in grid connected solar pv using Internet of Things .” is the bonafide work of “M. Anavatha Raj (920419105002), P. Dheeraj Kumar (920419105006), K. Puruchothaman (920419105011), N. Arun Karthick (920419105302)” who carried out the mini projectwork under my supervision.



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**INTERNAL EXAMINER**



**EXTERNAL EXAMINER**

# **SMART BATTERY MANAGEMENT SYSTEM USING INTERNET OF THINGS**

**A PROJECT REPORT**

*Submitted by*

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**JEENATH R (920419105008)**

**VIGNESH S (920419105019)**

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**INTERNAL EXAMINER**



**EXTERNAL EXAMINER**

**EXPERIMENTAL INVESTIGATION OF BUILDING INTEGRATED  
SOLAR PHOTOVOLTAIC ARRAY WITH DIFFERENT  
INTERCONNECTION PATTERN**

**A PROJECT REPORT**

*Submitted by*

**BENJAMIN DEVA SAKAYAM S (920419105004)**

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Certified that the project report “**EXPERIMENTAL INVESTIGATION OF BUILDING INTEGRATED SOLAR PHOTOVOLTAIC ARRAY WITH DIFFERENT INTERCONNECTION PATTERNS**” is the bonafide work of “**S.BenjaminDevaSakayam (920419105003), M.Sankarasathasivam (920419105013) & A.Dhanabal (920419105303)**” who carried out the project work under my supervision.

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**INTERNAL EXAMINER**

**EXTERNAL EXAMINER**

# **TWO PHASE TO THREE PHASE CONVERTER FOR AGRICULTURE PUMPING**

**A PROJECT REPORT**

*Submitted by*

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**INTERNAL EXAMINER**



**EXTERNAL EXAMINER**

# EXPERIMENTAL INVESTIGATION OF FLOATING TYPE SOLAR PV PANELS IN VARIOUS WATER COOLANTS

A PROJECT REPORT

*Submitted by*

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Certified that the project report "EXPERIMENTAL INVESTIGATIONS OF FLOATING TYPE SOLAR PV PANELS IN VARIOUS WATER COOLANTS" is the bonafide work of "S.JAYASHREE (920419105007), J.SAMYUKTHA (920419105012) & S.SHALINI (920410105014)" who carried out the project work under my supervision.



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**EXTERNAL EXAMINER**

# Performance Investigation of Bifacial Solar Photovoltaic Module Installed with Single Axis Tracking System

PROJECT REPORT

*Submitted by*

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NIJANTHAN. R (920419105501)

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**INTERNAL EXAMINER**



**EXTERNAL EXAMINER**

# PORTABLE BALL THROWING MACHINE

A PROJECT REPORT

*Submitted by*

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**MARCH 2023**

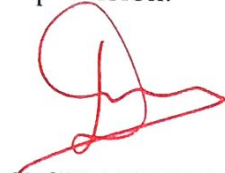


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**EXTERNAL EXAMINER**

# FABRICATION OF NATURAL DYE EXTRACTOR

A PROJECT REPORT

*Submitted by*

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MARI MUTHU G	(920429205306)

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**MARCH 2023**

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Certified that the project report “FABRICATION OF NATURAL DYE EXTRACTOR” is the bonafide work of “DEEPAK RAMJI S (920419105005), HARI HARAN A (920419105304) & MARI MUTHU G (920419105306)” who carried out the project work under my supervision.



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**INTERNAL EXAMINER**



**EXTERNAL EXAMINER**

**DEVELOPMENT AND TESTING OF A NANO BASED  
GRAPHENE MATERIAL FOR THE FILTRATION OF NON -  
PALATABLE WATER**

**PHASE I REPORT**

*Submitted by*

**SIVA BALAN A (920421411003)**

*In partial fulfillment for the award of the degree of*

**MASTER OF ENGINEERING  
IN  
POWER SYSTEMS ENGINEERING**



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**JANUARY 2023**

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## BONAFIDE CERTIFICATE

Certified that the project report “DEVELOPMENT AND TESTING OF A NANO BASED GRAPHENE MATERIAL FOR THE FILTRATION OF NON – PALATABLE WATER” is the bonafide work of A. SIVA BALAN (920421411003) who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



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**Supervisor ,**

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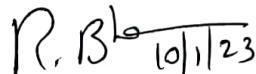
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**INTERNAL EXAMINER**



**EXTERNAL EXAMINER**



## ABSTRACT

There are many water management options due to the variety of **water sources, treatment methods, and recycling options available**. Modelling of sustainable water treatment options may require computationally efficient models. The purpose of this paper is to provide a comprehensive and comparative analysis of water management systems and their economic, environmental, and performance metrics. Water management systems are designed as a network of **water supplies, consumers, technology, recycling alternatives, and water quality**. Desalination systems receive special attention. **Thermal and desalination** are the two major technologies now employed for desalination. (e.g., seawater reverse osmosis “SWRO”, brackish water reverse osmosis “BWRO”). The new cutting-edge technology also includes a water filter. To filter water, graphene is employed as a **Nano - filtration** material. typically it have a unique structure demonstrates the same characteristics as **graphene** such as low weight, **high specific surface area, great mechanical/electrical properties**, and ease of functionalization. This research paper provides a summary of experimental and numerical studies of graphene nanometre-sized particles with various base host fluids for important engineering applications.

# **MODELLING AND STABILITY ANALYSIS OF RSC AND LSC OF A GRID CONNECTED 2.7 MW WIND TURBINE**

**PHASE I REPORT**

*Submitted by*

**VENKATESH M (920421411004)**

*In partial fulfillment for the award of the degree of*

**MASTER OF ENGINEERING**

**IN**

**POWER SYSTEMS ENGINEERING**



**DEPARTMENT OF ELECTRICAL AND ELECTRONICS**

**ENGINEERING**

**KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY**

**(An Autonomous Institution - Affiliated to Anna University, Chennai)**

**K.VELLAKULAM - 625 701 (Near Virudhunagar)**

**JANUARY 2023**

**KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY**  
(An Autonomous Institution- Affiliated to Anna University, Chennai)  
K.VELLAKULAM - 625 701 (Near Virudhunagar)

**BONAFIDE CERTIFICATE**

Certified that the project report “**MODELLING AND STABILITY ANALYSIS OF RSC AND LSC OF A GRID CONNECTED 2.7 MW WIND TURBINE**” is the bonafide work of **M. Venkatesh (920421411004)** who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



**SIGNATURE**  
**Dr. D. Prince Winston M.E., Ph.D.,**

**Head of the Department, .**

Professor,  
Dept. of EEE,  
Kamaraj College of Engg & Tech,  
K.Vellakulam, Near Virudhunagar



**SIGNATURE**  
**Dr. B. Gurukarthik Babu M.E., Ph.D.,**

**Supervisor ,**

Assistant Professor,  
Dept. of EEE,  
Kamaraj College of Engg & Tech,  
K.Vellakulam, Near Virudhunagar



**INTERNAL EXAMINER**



**EXTERNAL EXAMINER**



## ABSTRACT

The grid connected doubly fed induction generator (DFIG) system's electromagnetic stability problems are frequently disregarded. A reduced order small signal model is presented in this study that can be utilised to examine the stability of the DFIG dc-link voltage control system, particularly in weak ac grid settings. The dynamics of quick current control and DFIG flow are ignored in this model. However, consideration is given to the interactions between operating points, grid strengths, and control loops as well as their impact on the dynamic performance of the system. A comparison of the eigenvalues demonstrates that the proposed model retains the dominant oscillation mode exhibited by the detailed model and is appropriate for the stability study of the DFIG's dc-link voltage control system. The impact of active power control (APC)/reactive power control (RPC) on rotor-side converters (RSC) and phase-locked loop (PLL) on system stability is also analysed.

**FAULT DIAGNOSIS OF ELECTRICAL MACHINE USING SENSOR  
DATA BY ML TECHNIQUES**

**PHASE 1 REPORT**

*Submitted by*

**J GOKULA NARAYANAN (920421411001)**

*in partial fulfilment for the award of the degree of*

**MASTER OF ENGINEERING IN POWER SYSTEMS ENGINEERING**



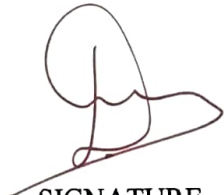
**KAMARAJ COLLEGE OF ENGINEERING & TECHNOLOGY**  
**(An Autonomous Institution- Affiliated to Anna University, Chennai)**  
**K. VELLAKULAM- 625701 (Near Virudhunagar)**

**JANUARY 2023**

**KAMARAJ COLLEGE OF ENGINEERING & TECHNOLOGY**  
**(An Autonomous Institution- Affiliated to Anna University, Chennai)**  
**K. VELLAKULAM- 625701 (Near Virudhunagar)**

**BONAFIDE CERTIFICATE**

Certified that this report titled “**FAULT DIAGNOSIS OF ELECTRICAL MACHINE USING SENSOR DATA BY ML TECHNIQUES**” is the bonafied work of **J GOKULA NARAYANAN (920421411001)** who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



SIGNATURE

**Dr.D. PRINCE WINSTON M.E,Ph.D.,**  
**PROFESSOR and HEAD**

Electrical and Electronics Engineering,  
Kamaraj College of Engineering and  
Technology,  
Madurai – 625701.



SIGNATURE

**Dr.M.SUDALAIMANI M.E, Ph.D.,**  
**ASSOCIATE PROFESSOR**

Electrical and Electronics Engineering,  
Kamaraj College of Engineering and  
Technology,  
Madurai – 625701.



**INTERNAL EXAMINER**



R.B 10/1/23

**EXTERNAL EXAMINER**

## **ABSTRACT**

Induction machines are without a doubt a crucial part of the industry and must therefore function in a stable and safe manner. Careless maintenance or operation of induction machines can result in machine defects, resulting in failures and ultimately a loss of funds and resources. In this document, the three-phase induction motor model was conceived in LabVIEW. It has been modelled in such a way that it can be simulated as an ideal or a healthy motor as well as a faulty motor having faults such as a stator winding fault, rotor fault and bearing or eccentricity fault. It can be simulated for various induction motor ratings and current, voltage and waveform values, it is possible to obtain data associated with defects which can be used in any application where defects in induction engines have to be detected.

# **DESIGN AND DEVELOPMENT OF NEW ADAPTIVE CHARGING TECHNIQUE FOR LITHIUM BATTERIES**

**PHASE I REPORT**

*Submitted by*

**PRAVIN M (920421411002)**

*In partial fulfillment for the award of the degree of*

**MASTER OF ENGINEERING  
IN  
POWER SYSTEMS ENGINEERING**



**DEPARTMENT OF ELECTRICAL AND ELECTRONICS  
ENGINEERING**

**KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY**

**(An Autonomous Institution - Affiliated to Anna University, Chennai)**

**K.VELLAKULAM - 625 701 (Near Virudhunagar)**

**JANUARY 2023**

# KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY

(An Autonomous Institution- Affiliated to Anna University, Chennai)

K.VELLAKULAM - 625 701 (Near Virudhunagar)

## BONAFIDE CERTIFICATE

Certified that the project report “**DESIGN AND DEVELOPMENT OF NEW ADAPTIVE CHARGING TECHNIQUE FOR LITHIUM BATTERIES**” is the bonafide work of **M. PRAVIN (920421411002)** who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



**SIGNATURE**

**Dr. D. Prince Winston M.E., Ph.D.,**  
**Head of the Department,**  
Professor,  
Dept. of EEE,  
Kamaraj College of Engg & Tech,  
K.Vellakulam, Near Virudhunagar



**SIGNATURE**

**Dr. D. Prince Winston M.E., Ph.D.,**  
**Supervisor ,**  
Professor,  
Dept. of EEE,  
Kamaraj College of Engg &Tech,  
K.Vellakulam, Near Virudhunagar



**INTERNAL EXAMINER**

R. B<sup>g</sup> 10/1/23

**EXTERNAL EXAMINER**



## ABSTRACT

The upcoming modern world is moving towards the pollution free environment. Instead of using fossil fuel fuels like petrol and diesel vehicle, Electric Vehicle has a great impact in the future. One of the main-problem in the real time implementation of E-Vehicle is battery management system (BMS). Charging time, charging efficiency, battery lifetime are the most important factors consider in BMS. The present BMS system just monitoring the performance characteristics of the battery bank. If the battery cells which are in the battery bank has different State of Charge (SoC) level, then the battery bank subjected to more amount of energy loss.

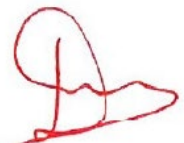
This issue affects the all the parameters mentioned above. In order to rectify all those issues with the help of charge balancing circuits. This proposed adaptive part approach based active charge balancing circuit helps us to balance the SoC levels of the cells and also increase the charging capacity of the battery bank. This proposed charging and balancing between the battery cells is done by the Series – Parallel (Se-P) switching combinations. The final results achieve that the proposes charging methodology will increase the charging capacity of battery bank by reducing the mismatching effects in between the battery cells. In case 2, the proposed charging technique will enhance the charging capacity up to 15% when compared with the conventional method. This proposed work will be developed as a product and suggested for implementing the additional features upcoming E-Vehicle models.

**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

S.No.	Name of the Student	From Date	To Date	Name of the Industry
1	Sri Vishnu Varshini.M	12.06.2023	26.06.2023	Ganesh electricals
2	Thigan.K.J	19.06.2023	05.07.2023	Azure soft tech
3	Ajay.M	19.06.2023	05.07.2023	Azure soft tech
4	Shreenachiaar.K.P	05.06.2023	20.07.2023	NIT, Trichy
5	Gopi Krishna.D	06.06.2023	23.06.2023	Metro info tech
6	Kavya.K	05.06.2023	19.06.2023	RJS automation services
7	Karpagavalli.P	12.06.2023	26.06.2023	Ganesh electricals
8	Thangaselvam.R	05.06.2023	19.06.2023	RJS automation services
9	Vetrivel.G	05.06.2023	27.06.2023	Sri vishnu shankar mills ltd
10	Dharani.D	05.06.2023	19.06.2023	RJS automation services
11	Darsan.S	10.06.2023	10.07.2023	Futurik technology
12	Abdul Malik.A	05.06.2023	19.06.2023	RJS automation services
13	Manoj.R	05.06.2023	19.06.2023	Yokama
14	Caroline Reshma.N	05.06.2023	19.06.2023	RJS automation services



<b>S.No.</b>	<b>Name of the Student</b>	<b>From Date</b>	<b>To Date</b>	<b>Name of the Industry</b>
15	Kalaimani.N	05.06.2023	19.06.2023	RJS automation services
16	Subha Shri.M	05.06.2023	19.06.2023	RJS automation services
17	Janani Priya.A	05.06.2023	19.06.2023	RJS automation services
18	Shalini.R	05.06.2023	19.06.2023	RJS automation services
19	Senthil Velan.B	19.06.2023	05.07.2023	Azure soft tech
20	Prakash.A	19.06.2023	05.07.2023	Azure soft tech
21	Karthick Gowtham.C	20.06.2023	11.07.2023	Friends electrical Pvt Ltd
22	Bharathi.K	05.06.2023	19.06.2023	RJS automation services
23	Viswambaran.R	20.06.2023	11.07.2023	Friends electrical Pvt Ltd
24	Jegadeesh Maniyan.A	20.06.2023	11.07.2023	Friends electrical Pvt Ltd
25	Nareshkumar.V	20.06.2023	11.07.2023	Friends electrical Pvt Ltd
26	Nallaiah.M	20.06.2023	11.07.2023	Friends electrical Pvt Ltd
27	Yogeshkumar.M	05.06.2023	19.06.2023	RJS automation services
28	Mohamedsajudheen.A	20.06.2023	11.07.2023	Friends electrical Pvt Ltd
29	Praveenkumar.S	05.06.2023	19.06.2023	RJS automation services



**HoD/EEE**





GSTIN : 33ALAPG1498H1ZB

# GANESH ELECTRICAL

(HT & LT ELECTRICAL ENGINEERING CONTRACTORS, PANEL FABRICATORS & POWER FACTOR CONSULTANT)

85/1A, P.P.V. Nandavanam Street, Virudhunagar - 626 001. Ph : 04562 296377

E-mail : ganesh.electrical@yahoo.com, ganesh.electrical2077@gmail.com

E.A. : 2301



220QJX21

V. GANESAN  
94431 52077

26.06.2023

## INPLANT TRAINING CERTIFICATE

This is to certify that **Ms. M.Sri Vishnu Varshini** D/o. Mr. M.Muthu Venkat Raman, Studying Third Year BE In Electrical and Electronics Engineering at Kamaraj College of Engineering And Technology, Virudhunagar has undergone In plant training In my concern from 12.06.2023 to 26.06.2023.

She has done some excellent studies. During this period, her Conduct and Character are very good.

For GANESH ELECTRICAL

  
Proprietor





# AZURE Soft Tech Solutions

Innovation Explored

July 05, 2023

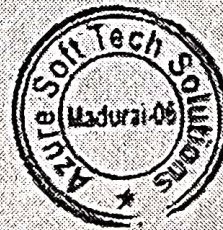
Ref: ASTS/INT/2023/065

## TO WHOM IT MAY CONCERN

This is to certify that Mr. THIGAN K J (Reg. No. 920421105022) Third year B.E – Electrical and Electronics Engineering student of Kamaraj College of Engineering & Technology, Virudhunagar, had been associated with AZURE Soft Tech Solutions as an Intern – and has successfully completed his mini project in Recent Frontend Frameworks for the period from June 19, 2023 to July 05, 2023.

During the tenure with us, we found Mr. THIGAN K J, sincere and result oriented.

We wish Mr. THIGAN K J, all the best for his future endeavors.



For Azure Soft Tech Solutions

**RAMESH V**

Operation Head



+91-63693 12310



0452-7968996



hr@azuresofttechsolutions.com



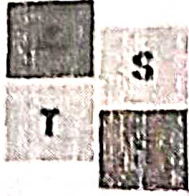
www.azuresofttechsolutions.com



No.74, Pandiyan Nagar, Thirunagar, Madurai, Tamilnadu - 625006







# AZURE Soft Tech Solutions

Innovation Explored

July 05, 2023

Ref: ASTS/INT/2023/066

## TO WHOM IT MAY CONCERN

This is to certify that Mr. AJAY M (Reg. No. 920421105003) Third year B.E – Electrical and Electronics Engineering student of Kamaraj College of Engineering & Technology, Virudhunagar, had been associated with AZURE Soft Tech Solutions as an Intern – and has successfully completed his mini project in Recent Frontend Frameworks for the period from June 19, 2023 to July 05, 2023.

During the tenure with us, we found Mr. AJAY M, sincere and result oriented.

We wish Mr. AJAY M, all the best for his future endeavors.



For Azure Soft Tech Solutions

**RAMESH V**  
Operation Head





वैद्युतिकी व कणकीय अभियांत्रिकी.

राष्ट्रीय प्रौद्योगिकी संस्थान तिरुचिरापल्ली, तमिलनाडु - 620 015, भारत

Department of Electrical and Electronics Engineering

National Institute of Technology Tiruchirappalli, Tamil Nadu - 620 015, India

www.nitt.edu

Tel : + 91(0)431-2503250 E-mail :

S.kumar@nitt.edu

20<sup>th</sup> July 2023

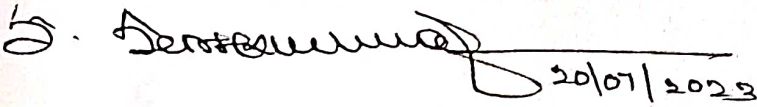
### INTERNSHIP CERTIFICATE

This is to certify that Ms. K. P. SHREE NACHIAAR, [21UEE004] from Kamaraj College of Engineering and Technology, S.P.G. Chidambara Nadar, C.Nagammal Campus, Vellakulam, Tamil Nadu-625701, has completed the internship program at Department of Electrical and Electronics Engineering, National Institute of Technology, Tiruchirappalli-620015.

Ms. K. P. SHREE NACHIAAR, started joining the program from 5<sup>th</sup> June 2023 to 20<sup>th</sup> July 2023. During her stay at NIT Tiruchirappalli as an Intern, she learnt the Fundamentals, Modelling and Simulation of Battery, Battery Management systems for Electric Vehicle (EV) Applications and also, she displays enthusiasm, leadership, self-discipline, and self-motivation.

We wish all the very best in her future endeavours.

Sincerely,

  
20/07/2023

डॉ. सु. सेंथिल कुमार / Dr. S. SENTHIL KUMAR

सहयोगी प्राध्यापक / Associate Professor

वैद्युतिकी व कणकीय अभियांत्रिकी / Department of Electrical and Electronics Engineering

राष्ट्रीय प्रौद्योगिकी संस्थान / National Institute of Technology

तिरुचिरापल्ली - 620 015 / Tiruchirappalli - 620 015.

तमिलनाडु, भारत / TamilNadu, INDIA







Metro Info Tech

GSTIN No.: 33ADEPU8093J1Z0

Date: 23/06/2023

**TO WHOM IT MAY CONCERN**

This is to certify that Gopi Krishna D (920421UEE005) a student of Department Of EEE at Kamaraj College of Engineering & Technology has successfully completed 15 Days from (06-06-2023 T 23-06-2023) short internship programme at our Company **METRO INFO TECH** during this period of his internship Programme with he was found smart working and inquisitive

For Metro Info Tech

Proprietor

**METRO info TECH**

3/30 Vikram Plaza West Car Street  
Sivakasi- 626123

CT No. : 9650897509,9500918791  
metroinfotech23@gmail.com

[www.metroinfotech.in](http://www.metroinfotech.in)





**RAJES SERVICES**  
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# CERTIFICATE OF INTERNSHIP

This certificate is bestowed to ..... **Kavya .K.** .....

for the outstanding performance in the internship in.....

..... **SOLAR .. ENERGY .....** .. conducted from **05.06.23. to .19.06.23.**

*[Signature]*  
M.D

*[Signature]*  
CEO



# GANESH ELECTRICAL

(HT & LT ELECTRICAL ENGINEERING CONTRACTORS, PANEL FABRICATORS & POWER FACTOR CONSULTANT)

25/7A, P.O.V. Handavanam Street, Virudhunagar - 625 001. Ph: 04562 296377  
E-mail: ganesh.electrical@yahoo.com, ganesh.electrical2077@gmail.com



25.06.23

V. GANESAN  
2443162077

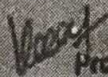
26.06.2023

## INPLANT TRAINING CERTIFICATE

This is to certify that **Ms. P.Karpagavali** D/o. Mr. M.Ponraj, Studying Third Year BE In Electrical and Electronics Engineering at Kamaraj College of Engineering And Technology, Virudhunagar has undergone in plant training in my concern from 12.06.2023 to 26.06.2023.

She has done some excellent studies. During this period, her Conduct and Character are very good.

For GANESH ELECTRICAL

  
Proprietor





**P.J. SERVICES**  
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# CERTIFICATE OF INTERNSHIP

*This certificate is bestowed to ..... TRANVASSELVAM: R.....  
for the outstanding performance in the internship in.....  
..... SODAR.. ENERGY..... conducted from 05:06:23.10..19:06:23.*

*J. J.*  
M.D

*R. J. S.*  
CEO



# SRI VISHNU SHANKAR MILL LIMITED

(Government of India Recognised Export House)

Regd. Office : Sri Vishnu Shankar Mill Premises, Post Box No. 100,

P.A.C. Ramasamy Raja Salai, RAJAPALAIYAM - 626 117,

Tamil Nadu, India.

CIN : U17301TN1981PLC008677

FAN : AACCS0536Q

GSTIN : 33AACCS0536Q1Z7

Telephone : 91 4563 235552-55 (4 Lines)

Fax : 91 4563 236493

E-mail : svsm@ramcotex.com

: svsm@bsnl.in

Website : www.vishnushankarmill.co.in

Date: 15.06.2023

## CERTIFICATE

This is to certify that, **G.Vetrivel** a student of 2<sup>nd</sup> Year Electrical & Electronic Engineering of Kamaraj College of Engineering & Technology, Virudhunagar underwent an In-Plant training in our mill from 06.06.2023 to 22.06.2023. He had shown keen interest in learning the systems & procedures and his conduct and character are good during this period. We wish him all success in his every walk of life.

SRI VISHNU SHANKAR MILL LIMITED.



Vice President (Works)



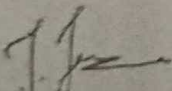
**EUS SERVICES**  
SERVE THE NATION WITH PASSION

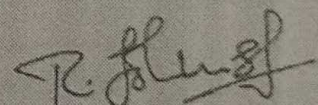
## CERTIFICATE OF INTERNSHIP

*This certificate is bestowed to ..... D. DIARANI .....*

*for the outstanding performance in the internship in .....*

*..... SOLAR ENERGY .....* conducted from 05:06:23 to 19:06:23

  
M.D

  
CEO





FUTURIK Technologies

Innovation at its Best

Reg No. P7FL210004390061

# Internship Certificate

This Certificate has been awarded to

S. PADMINI

on completion of ..... ONE ..... month of Internship in the area of

WEB DEVELOPMENT AND SERVER HOSTING.

Presented on 10.6.2023 day of 10.7.2023. In appreciation of your work



*[Signature]*

Durga Muraidharan

Head Operations





**P.J. SERVICES**  
SERVE THE NATION WITH PASSION

# CERTIFICATE OF INTERNSHIP

*This certificate is bestowed to ..... ABDUR. MALIK. A. ....  
for the outstanding performance in the internship in.....  
.....SOMER. ENERGY ..... conducted from 05.06.23. to. 19.06.23.*

*J. J.*  
M.D.

*R. J. [Signature]*  
CEO

Active



Ref: ATC/TVL/TRG/23-24/23

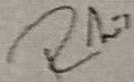
04.07.2023

**CERTIFICATE**

This is to certify that Mr.A.Manoj (Reg. No.920421105014) a student of Bachelor of Engineering (EEE) from Kamaraj College of Engineering and Technology, Virudhunagar has completed his Summer Internship in Engineering during the period from 05.06.2023 to 04.07.2023.

We wish him all success in his future endeavor.

For ATC Tires Private Limited



R.SENTHIL,  
DGM - HR & IR



**ALLIANCE GALAXY PRIMEX**

ATC Tires Pvt. Ltd.

Plant: Sipcot-SEZ, Plot No.A-2, Sipcot Industrial Growth Centre, Gangaikondan, Dist. Tirunelveli, Tamil Nadu - 627 352.  
Phone: +91 462 6800612 | Email : info@yokohama-ohf.com

Registered Office : Unit No. 1001, 10<sup>th</sup> Floor Tower A, Embassy 247, LBS Marg, Vikhroli (West), Mumbai - 400 083  
Phone: +91 22 3957 9600 | Fax: +91 22 3957 9699 | Email : info@yokohama-ohf.com | CIN : U25111MH2007PTC172456





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# CERTIFICATE OF INTERNSHIP

*This certificate is bestowed to ... CAROLINE .. RESHMA .. N ..  
for the outstanding performance in the internship in .....*

*..... SOLAR .. ENERGY .....* conducted from 05:06:23 to 19:06:23 ..

*J. J.*  
M.D

*R. J. J.*  
CEO





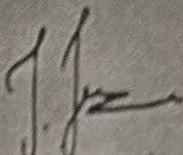
**RJS SERVICES**  
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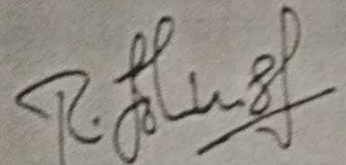
# CERTIFICATE OF INTERNSHIP

*This certificate is bestowed to ..... KALAIMANI: N.....*

*for the outstanding performance in the internship in.....*

*..... SOLAR ENERGY..... conducted from 05.06.23 to 19.06.23.*

  
M.D

  
CEO





**RJS SERVICES**  
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# CERTIFICATE OF INTERNSHIP

*This certificate is bestowed to ..... SUBHA, SHRI.: M.....*

*for the outstanding performance in the internship in.....*

*..... SOLAR ENERGY..... conducted from 05.06.23 to 19.06.23.*

*J. J.*  
M.D

*R. Singh*  
CEO





**HLS SERVICES**  
SERVE THE NATION WITH PASSION

**CERTIFICATE  
OF INTERNSHIP**

*This certificate is bestowed to ... JANANI, Priya: A.....  
for the outstanding performance in the industry.....*

*... SOLAR ... ENERGY..... conducted from 05.06.23 to 19.06.23.*

*J. J.*  
M.D

*R. J. ...*  
CEO





**EJIS SERVICES**  
SERVE THE NATION WITH PASSION

# CERTIFICATE OF INTERNSHIP

*This certificate is bestowed to..... SHARINI: R.....  
for the outstanding performance in the internship in.....  
..... SOLAR... ENERGY..... conducted from 05.06.23. to 19.06.23.*

*J. J.*  
M.D

*R. K. W.*  
CEO





July 05, 2023

Ref: ASTS/INT/2023/067

## TO WHOM IT MAY CONCERN

This is to certify that Mr. SENTHIL VELAN B (Reg. No. 920421105016) Third year B.E – Electrical and Electronics Engineering student of Kamaraj College of Engineering & Technology, Virudhunagar, had been associated with AZURE Soft Tech Solutions as an Intern – and has successfully completed his mini project in Recent Frontend Frameworks for the period from June 19, 2023 to July 05, 2023.

During the tenure with us, we found Mr. SENTHIL VELAN B, sincere and result oriented.

We wish Mr. SENTHIL VELAN B, all the best for his future endeavors.



For Azure Soft Tech Solutions

RAMESH V

Operation Head



+91-63693 12310



0452-7968996



hr@azuresofttechsolutions.com



www.azuresofttechsolutions.com



No.74, Pandiyan Nagar Thirunagar, Madurai Tamilnadu- 625006







# AZURE Soft Tech Solutions

Innovation Explored

July 05, 2023

Ref: ASTS/INT/2023/068

## TO WHOM IT MAY CONCERN

This is to certify that Mr. PRAKASH A (Reg. No. 920421105015) Third year B.E – Electrical and Electronics Engineering student of Kamaraj College of Engineering & Technology, Virudhunagar, had been associated with AZURE Soft Tech Solutions as an Intern – and has successfully completed his mini project in Recent Frontend Frameworks for the period from June 19, 2023 to July 05, 2023.

During the tenure with us, we found Mr. PRAKASH A, sincere and result oriented.

We wish Mr. PRAKASH A, all the best for his future endeavors.



For Azure Soft Tech Solutions

**RAMESH V**

Operation Head



+91 83693 12310



0432 7266125



[hr@azuresofttechsolutions.com](mailto:hr@azuresofttechsolutions.com)



[www.azuresofttechsolutions.com](http://www.azuresofttechsolutions.com)

No.74 Panarayan Nagar, Tirunagar, Madurai, Tamilnadu - 625005





Cell No 994227048  
8754621775



# FRIENDS ELECTRICALS

Director of Electrical  
BASKARAN

71, Anna Nagar,  
Samayanallur, Madurai - 625402

DATE:11.7.2023

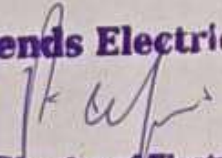
## TO WHOM SO EVEN IT MAY CONCERN

This is to certify that Mr.C. Karthick gowtham The students of Electrical and Electronics Engineering (EEE) from Kamaraj College Of Engineering and Technology has successfully completed internship training program on Busbar connection , Cable laying Learning and Working Process in our organization **FRIENDS ELECTRICALS PVT LTD** from 20.06.2023 to 11.07.2023 During the live project his performance is certified as good.

WE WISH ALL SUCCESS IN ACADEMIC PERFORMANCE

For Friends Electricals Pvt Ltd.,

**For Friends Electricals**

  
**Director of Electrical**

Authorized Signatory





**P.J.S SERVICES**  
SERVE THE NATION WITH PASSION

# CERTIFICATE OF INTERNSHIP

This certificate is bestowed to ..... BHARATHI ..K.....

for the outstanding performance in the internship in.....

..... SDRAR. ENERGY..... conducted from 05:06:23. to. 19.06.23.

*J. J.*  
M.D.

*R. J. Singh*  
CEO





Call No: 944227044  
8754621775



# FRIENDS ELECTRICALS

Director of Electrical  
BASKARAN

71/5, Anna Nagar,  
Samayanallur, Madurai - 625402

DATE:11.07.2023

TO WHOM SO EVEN IT MAY CONCERN

This is to certify that Mr. **R.VISHWAMBARAN** The students of Electrical and Electronics Engineering (EEE) from Kamaraj College Of Engineering and Technology has successfully completed internship training program on Busbar connection , Cable laying Learning and Working Process in our organization **FRIENDS ELECTRICALS PVT LTD** from 20.06.2023 to 11.07.2023 During the live project his performance is certified as good.

WE WISH ALL SUCCESS IN ACADEMIC PERFORMANCE

For Friends Electricals Pvt Ltd.,

**For Friends Electricals**

A handwritten signature in black ink, appearing to be 'P. Uf', written over the printed name of the Director of Electrical.

**Director of Electrical**

Authorized Signatory



Call No: 994217049  
8754621776



# FRIENDS ELECTRICALS

Director of Electrical  
BASARAN

71/5, Anna Nagar,  
Sembayalur, Madurai - 625402

DATE: 21.07.2023

## TO WHOM SO EVEN IT MAY CONCERN

This is to certify that Mr. **A. JEGADEESH MANIYAN** The students of Electrical and Electronics Engineering (EEE) from Kamana College Of Engineering and Technology has successfully completed internship training program on Subbar connection, Cable laying Learning and Working Process in our organization **FRIENDS ELECTRICALS PVT LTD** from 20.05.2023 to 31.07.2023. During this his performance is testified as good.

WE WISH ALL SUCCESS IN ACADEMIC PERFORMANCE

For Friends Electricals Pvt Ltd.,

**For Friends Electricals**

  
Director of Electrical

Authorized Signatory



Cell No 994227048  
8754621775

# FRIENDS ELECTRICALS

Director of Electrical  
BASKARAN

71/5, Anna Nagar,  
Samayanallur, Madurai - 625402

DATE: 11.07.2023

TO WHOM SO EVEN IT MAY CONCERN

This is to certify that Mr. **NARESHKUMAR.V** The students of Electrical and Electronics Engineering (EEE) from Kamaraj College Of Engineering and Technology has successfully completed internship training program on Busbar connection , Cable laying Learning and Working Process in our organization **FRIENDS ELECTRICALS PVT LTD** from 20.06.2023 to 11.07.2023 During the live project his performance is certified as good.

WE WISH ALL SUCCESS IN ACADEMIC PERFORMANCE

For Friends Electricals Pvt Ltd.,

**For Friends Electricals**

  
Director of Electrical

Authorized Signatory



Cell No: 994227048  
8754621775



# FRIENDS ELECTRICALS

Director of Electrical  
BASKARAN

71/5, Anna Nagar,  
Samayanallur, Madurai - 625402

---

DATE:11.07.2023

## TO WHOM SO EVEN IT MAY CONCERN

This is to certify that Mr. **M. Nallaiah** The students of Electrical and Electronics Engineering (EEE) from Kamaraj College Of Engineering and Technology has successfully completed Internship training program on Busbar connection , Cable laying Learning and Working Process in our organization **FRIENDS ELECTRICALS PVT LTD** from 20.06.2023 to 11.07.2023  
During the live project his performance is certified as good.

WE WISH ALL SUCCESS IN ACADEMIC PERFORMANCE

For Friends Electricals Pvt Ltd.,

**For Friends Electricals**

  
Director of Electrical

Authorized Signatory





**IRJS SERVICES**  
SERVE THE NATION WITH PASSION

# CERTIFICATE OF INTERNSHIP

This certificate is bestowed to ..... **YOGESH KUMAR.. M.** .....  
for the outstanding performance in the internship in.....

..... **SOLAR.. ENERGY**..... conducted from: 05.06.23. to. 19.06.23.

M.D

CEO



# Internship certificate

Cell No: 994227011  
8754621775



## FRIENDS ELECTRICALS

Director of Electrical  
BASKARAN

71/5, Anna Nagar,  
Samayanallur, Madurai - 625402

---

DATE:11.07.2023

### TO WHOM SO EVEN IT MAY CONCERN

This is to certify that Mr. A. MOHAMEDSAJUDHEEN The students of Electrical and Electronics Engineering (EEE) from Kamaraj College Of Engineering and Technology has successfully completed Internship training program on Busbar connection , Cable laying Learning and Working Process in our organization FRIENDS ELECTRICALS PVT LTD from 20.06.2023 to 11.07.2023 During the live project his performance is certified as good.

WE WISH ALL SUCCESS IN ACADEMIC PERFORMANCE

For Friends Electricals Pvt Ltd.,

**For Friends Electricals**

A handwritten signature in black ink, appearing to be 'P. U.', written over the printed name of the Director of Electrical.

**Director of Electrical**

Authorized Signatory





**FNS SERVICES**  
SERVE THE NATION WITH PASSION

# CERTIFICATE OF INTERNSHIP

*This certificate is bestowed to ..... PRAVEEN, KUMAR, S.....  
for the outstanding performance in the internship in.....  
..... SOLAR... ENERGY..... conducted from 05.04.23 to 14.04.23..*

*J. J.*  
M.D

*R. Singh*  
CEO



**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

Internship Details:

S.No	Name of the Student	From Date	To Date	Name of the Industry
1.	SAKTHIVEL.N	08.06.2023	24.06.2023	N-bays IT solution
2.	VISHAL.M.S	07.06.2023	07.07.2023	Lakshmi electrical works
3.	GOBINATH.M	07.06.2023	24.06.2023	Senmac solar india
4.	RAMKUMAR.K	15.06.2023	30.06.2023	Poets automation
5.	VIJAY.K	15.06.2023	30.06.2023	Poets automation
6.	SHALINI.D	12.06.2023	26.06.2023	IPCS global
7.	THIRUPPATHI.P	12.06.2023	28.06.2023	Rathi uv curing chambers
8.	SANJAY BHARATHI.B	08.06.2023	24.06.2023	N-bays IT solution
9.	DEVAKALIDASS.K	17.06.2023	04.07.2023	Web walk infosys
10.	MOHAMED LUQMAAN.P	07.06.2023	24.06.2023	Senmac solar india
11.	AMRUTHA SRI.G	06.06.2023	06.07.2023	NIT
12.	ANANTH.K	28.03.2023	27.04.2023	Tvs sensing solution
13.	HARI HARA PRABHU.R	05.06.2023	23.06.2023	Able electronics
14.	ARUN.M	08.06.2023	24.06.2023	N-bays ITsolution
15.	SRIDHAR.K	08.06.2023	24.06.2023	N-bays IT solution
16.	BHAVYA SREE.C	12.06.2023	26.06.2023	IPCS global
17.	NISHITHA.S	06.06.2023	06.07.2023	NIT
18.	SANTHOSHKUMAR.P	07.06.2023	24.06.2023	Senmac solar india
19.	SANTHIYA BHARATHI.K	06.06.2023	06.07.2023	NIT
20.	SHAILEASH.M	17.06.2023	04.07.2023	Web walk infosys
21.	BIJESH.A	12.06.2023	12.07.2023	SVS Foods
22.	VIJAYAKUMAR.K	17.06.2023	04.07.2023	Web walk infosys
23.	KEERTHANA.G	06.06.2023	06.07.2023	NIT
24.	SUDHARSAN.J	08.06.2023	24.06.2023	N-bays IT solution
25.	SUDHARSON.S	08.06.2023	24.06.2023	RJS solar system
26.	NAVANEETHAKRISHNAN.N	08.06.2023	24.06.2023	N-bays IT solution
27.	BALAMURUGAN.N	08.06.2023	24.06.2023	N-bays IT solution
28.	MOHAMEDKALITH.S	08.06.2023	24.06.2023	N-bays IT solution
29.	SRI SANJAY RAM.K	07.06.2023	24.06.2023	Senmac solar india
30.	LOGESH.S	12.06.2023	28.06.2023	Rathi uv curing chambers
31.	MARTIN SAIMAN.R	12.06.2023	28.06.2023	Rathi uv curing chambers
32.	VIJAY.P	12.06.2023	28.06.2023	Rathi uv curing chambers
33.	SRIDHAR.B	12.06.2023	28.06.2023	Rathi uv curing chambers
34.	ROHITH RAJU.M	19.06.2023	05.07.2023	Sri vinayaga electricals



# Internship Certificate

This is to certify that

**N. Sakthivel**

Student of B.L. (Electrical and Electronic Engineering) from

**Kamaraj College of Engineering and Technology, Virudhunagar**

has successfully completed the Internship Training on

**Web Development using PHP**

Held from 08.05.2023 to 27.05.2023

28/05/2023  
Date:

*P. Sakthivel*

Authorized Signatory  
(Branch Manager)





# LAKSHMI ELECTRICAL WORKS

Government Approved 'ESA' Grade Electrical Contractor & Panel Fabricators  
E-mail : lakshmiew@yahoo.co.in Web : www.lewtry.com

REF: LEW/Lr/IPT/002/2023

DATE: 07.07.2023

## CERTIFICATE


This is certify that Mr. M.S.VISHAL, pursuing his B.E., 3rd year (Reg.No.20UEE002) of Kamaraj College of Engineering & Technology, S.P.G.C Nagar, K.Vellakulam - 625701 has successfully completed his Intership Training from 07.06.2023 to 07.07.2023 at UNIT-II, FACTORY in LAKSHMI ELECTRICAL WORKS, Trichy-15

We found his sincere, hardworking, and technically sound and result oriented. He worked well as part of a team during her tenure. We take this opportunity to thank and wish him all the best for her future.

For LAKSHMI ELECTRICAL WORKS

Place: Thuvakudi, Trichy  
Date : 07.07.2023



  
Authorized Signature



H.O. & Units - I : PU - 1, Electrical & Electronics Industrial Estate, Thuvakudi, Trichy - 620 015.  
Mobile : 98428-55023  
Unit - II Factory : DP S1/1, SIDCO Industrial Estate, Thuvakudi, Trichy - 620 015.  
Mobile : 98424 - 37023







**SENMAC SOLAR INDIA ( OPC ) PVT LTD**

CIN NO: U40106TN2020OPC134108

GSTIN: 33ABDCS3389P1ZP

Solar Energy Providers and EPC Consultants.

Website: [www.ssenmacsolar.in](http://www.ssenmacsolar.in)

Mail Id : [senmacsolar@gmail.com](mailto:senmacsolar@gmail.com)

Mobile : 9486953596.

Date: 24/06/2023

TO WHOM-SO-EVER IT MAY CONCERN

Shri. M. GOBINATH (Reg. No.: 20UEE003) is a student of Kamaraj College of Engineering and Technology studying in B.E Electrical and Electronics Engineering 3<sup>rd</sup> year worked under our supervision during his internship period (2 weeks) in a spread over period of 07/06/2023 to 24/06/2023. We are pleased to state that he worked hard and evinced a scholastic bent of mind towards given work.

We wish him a great success in all his endeavors and career.

Madurai.

MANAGER

Senmac Solar India (P) Ltd

Madurai.

C.F.O

Senmac Solar India (P) Ltd

Madurai.





SARA EQUIPMENT

16 Plot no-304D, RR Industrial Estate, Singanallur, Coimbatore-641005

GST:33FEOPSS9932G1ZU/ UDYAM-TN-03-0033521

(Manufacturer Of Conveyors, SPM, Material Handling Equipments, Rack & Bins Etc.),

# CERTIFICATE OF COMPLETION

presented to :

**RAM KUMAR.K**

Department of Electrical & Electronics Engineering  
Kamaraj College Of Engineering & Technology

has successfully Completed Internship in our Concern and learned about  
Material Handling Systems and Industrial Automation.

[from 15.06.2023 to 30.06.2023]

Director

Managing Director







(SARA EQUIPMENT)

16 Plot no-304D, RR Industrial Estate, Singanallur, Coimbatore-641005  
GST:33FEOPS9932G1ZU/ UDYAM-TN-03-0033521

(Manufacturer Of Conveyors, SPM, Material Handling Equipments, Rack & Bins Etc.),

# CERTIFICATE OF COMPLETION

presented to :

**VIJAY.K**

Department of Electrical & Electronics Engineering  
Kamaraj College Of Engineering & Technology

has successfully Completed Internship in our Concern and learned about  
Material Handling Systems and Industrial Automation.  
[from 15.06.2023 to 30.06.2023]

Director



Managing Director





# Certificate of Participation

This certificate of participation is hereby granted to

SHALINI . D

for his/her excellent active participation in our INTERNSHIP (Embedded) session

on the topic C. Programming language, Pic, Arm, Raspberry pi, Python language.

conducted at IPCS GLOBAL - COIMBATORE.

we wish him/her all the very best for the future



PROGRAM CO-ORDINATOR



BRANCH HEAD



TIN : 33BFMPP4264D12G

Cell : 98436 02048  
95436 02048



# RATHI

## UV Curing Chambers

S/3056/6, Muniswaran Colony, SIVAKASI EAST - 626 189.

E-Mail Id : rathiuvcc@gmail.com

Date : 7.7.2023

### CERTIFICATE

This is to certify that Selvan P. THIRUPPATHI S/o K. PARAMASIVAM  
Studying Fourth Year EEE in Kamaraj College of Engineering and  
Technology, Virudhunagar. have undergone "Internship" in our firm during the  
period from 15.06.2023 to 30.06.2023 Successfully.

During the training period his Motivation are found Good



K. D. J. 10/8/2023

**RATHI UV CURING CHAMBERS**  
S/3056/6, Muniswaran Colony  
Narasipuram Road, SIVAKASI  
Virudhunagar District - 626189



1st Floor, Ponmeni Narayanan Street,

Madurai, Madurai – 625 010.

info@webwalk.org

Phone: 8056361688,

368886



**WebWalk**  
i n f o s y s  
— reach your search —

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# *Internship Certificate*

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*This is to certify that*

***K. DEVAKALIDASS***

*Student of*

*B.E., (Electrical and Electronics Engineering) from*

*Kamaraj College of Engineering and Technology, Virudhunagar*

*has Successfully Completed the Internship Training on*

*Web Development using PHP*

*Held From* 17-06-2023 *to* 04-07-2023

04-07-2023

*Dated*

*S. Thange Perumal*  
*Authorized Signatory*





**SENMAC SOLAR INDIA ( OPC ) PVT LTD**

CIN NO: U40106TN2020OPC134108

GSTIN: 33ABDCS3389P1ZP

Solar Energy Providers and EPC Consultants.

Website: [www.ssenmacsolar.in](http://www.ssenmacsolar.in)

Mail id : [senmacsolar@gmail.com](mailto:senmacsolar@gmail.com)

Mobile : 9486953596

Ref: .....

Date: 24/06/23

TO WHOM-SO-EVER IT MAY CONCERN

Shri. P. MOHAMED LUQMAAN (Reg. No.: 20UEE010) is a student of Kamaraj College of Engineering & Technology studying in B.E Electrical and Electronics Engineering 3<sup>rd</sup> year worked under our supervision during his internship period (2 weeks) in a spread over period of 07/06/2023 to 24/06/2023. We are pleased to state that he worked hard and evinced a scholastic bent of mind towards given work.

We wish him a great success in all his endeavors and career.

Madurai.

MANAGER  
Senmac Solar India (P) Ltd  
Madurai.

C.E.O  
Senmac Solar India (P) Ltd  
Madurai.





Dr. P. RAJA  
Associate Professor

05<sup>th</sup> July 2023

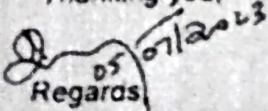
TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms. G.AMRUTHA SRI, pre-final year B.E. - Electrical and Electronics Engineering, Kamaraj College of Engineering and Technology, Virudhunagar has successfully completed her ONE MONTH (05.06.2023 to 05.07.2023) internship in the department of Electrical and Electronics Engineering, NIT Tiruchirappalli. During her internship she learnt about:

- Designing of circuits
- Voltage Transducer - LV-25 P - Data sheet
- Current Transducer - LA 55 P - Data sheet
- Configuration of ESP - 8266 Wi-Fi Module with sensors
- Analog to Digital Converter - ADS 1115

During this internship she showcased herself well behaved, sincere, and obedient. At this junction, I would like to thank and appreciate her, and the efforts taken by the institute of Kamaraj College of Engineering and Technology, Virudhunagar.

Thanking you,

  
05/07/2023  
Regards

Dr. P. Raja, M.Tech., Ph.D.  
Associate Professor

Dept. of Electrical & Electronics Engg  
National Institute of Technology  
Tiruchirappalli - 620 015, Tamil Nadu, India





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EXPECTATION UNLIMITED

163-C/1, Kamarajar Salai, Madurai-625009,

Tamilnadu, India.

+91-452-4243616 | info@itsolusenZ.com

GST IN : 33CNGPS6286M128

## *Internship Certificate*

*This is to certify that*

**M. ARUN**

*A Student of B.E., (Electrical and Electronics Engineering) from*

**Kamaraj College of Engineering and Technology, Virudhunagar**

*has Successfully Completed the Internship Training on*

**Web Development using PHP**

*Held from* 08-05-2023 *to* 24-05-2023

24/05/2023

*Dated*

*P. Sathish*

*Authorized Signatory  
(Branch Manager)*



NEBAYS IT SOLUTIONS  
EXPECTATION DEFINITELY

# Internship Certificate

This is to certify that

**K SRIDHAR**

Student of B.E. (Electrical and Electronics Engineering) from  
Kannur College of Engineering and Technology, Virudhunagar

has successfully completed the Internship Training on

**Web Development using PHP**

Held from

08-05-2023

to

21-05-2023

**P. Sathish**

Authorized Signatory  
(Branch Manager)

21/05/2023  
Dated





# Certificate of Participation

This certificate of participation is hereby granted to

BHAVYA SREE.C

for his/her excellent active participation in our INTERNSHIP(Embedded) session

on the topic C programming language, Pic, Arm, Raspberry pi, Python language.

conducted at IPCS GLOBAL - COIMBATORE

we wish him/her all the very best for the future



PROGRAM CO-ORDINATOR



BRANCH HEAD





Department of Electrical and Electronics Engineering  
NATIONAL INSTITUTE OF TECHNOLOGY  
Trichirappalli -620 015 Tamil Nadu, India

Date: 06-07-2023

INTERNSHIP COMPLETION CERTIFICATE

This is to certify that Ms. S.NISHITHA, pre final year, Department of Electrical and Electronics Engineering, Kamaraj College of Engineering and Technology Vellakulam 625701, has successfully completed her summer internship for the duration of one month from 6<sup>th</sup> June 2023 to 6<sup>th</sup> July 2023 as Department of Electrical and Electronics Engineering, National Institute of Technology, Trichirappalli-620015. During this period of internship, she was found punctual, hardworking and inquisitive.

S.P.  
6/7/2023

Dr. SISILAJ P SIMON,  
PROFESSOR  
Department of Electrical and Electronics Engineering,  
National Institute of Technology,  
Trichirappalli-620015







**SENMAC SOLAR INDIA ( OPC ) PVT LTD**

CIN NO: U40106TN2020OPC134108

GSTIN: 33ABDCS3389P1ZP

Solar Energy Providers and EPC Consultants.

Website: [www.ssenmacsolar.in](http://www.ssenmacsolar.in)

Mail id : [senmacsolar@gmail.com](mailto:senmacsolar@gmail.com)

Mobile : 9486953596.

Ref: .....

Date: 26/06/23

TO WHOM-SO-EVER IT MAY CONCERN

Shri. P. SANTHOSKUMAR (Reg. No.: 20UEE019) is a student of Kamaraj College of Engineering Technology studying in B.E Electrical and Electronics Engineering 3<sup>rd</sup> Year worked under our supervision during his internship period (2 weeks) in a spread over period of 07/06/2023 to 22/06/2023. We are pleased to state that he worked hard and evinced a scholastic bent of mind towards given work.

We wish him a great success in all his endeavors and career.

Madurai.

MANAGER

Senmac Solar India (P) Ltd

Madurai.

C.E.O

Senmac Solar India (P) Ltd

Madurai.



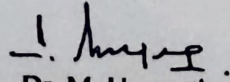


Department of Instrumentation and Control Engineering  
**NATIONAL INSTITUTE OF TECHNOLOGY**  
Tiruchirappalli -620 015 Tamil Nadu, India

Date: 06-07-2023

**INTERNSHIP COMPLETION CERTIFICATE**

This is to certify that Ms. K. SANTIYA BHARATHI, Roll No. 20UEE020, student of the Department of Electrical and Electronics engineering, Kamaraj College of Engineering and Technology, Virudhunagar, has successfully completed her internship program for the duration of one months from 6<sup>th</sup> June 2023 to 6<sup>th</sup> July 2023. She was working on "Piezoelectric energy harvesting" under my supervision.

  
Dr. M. Umapathy  
Mentor

**Dr. M. UMAPATHY**  
Professor  
Department of Instrumentation & Control Engineering  
National Institute of Technology  
Tiruchirappalli-620 015, Tamil Nadu, India



No. 1, 1st Floor, Perment Narayanan Street,  
S.S. Colony, Madurai - 625 010  
E-Mail: info@webwalk.org  
Contact: 8056361688,  
0452-4368886



# Internship Certificate

This is to certify that

**M. SHAILLEASH**

Student of

B.E., (Electrical and Electronics Engineering) from  
Kamaraj College of Engineering and Technology, Virudhunagar  
has Successfully Completed the Internship Training on  
Web Development using PHP

Held From 17-06-2023 to 04-07-2023

04-07-2023  
Dated

*S. Tharja panalun*  
Authorized Signatory





DATE: 12.07.2023

**TO WHOM SO EVER IT MAY CONCERN**

This is to certify that

Mr. Bijesh A (Reg No:920420UEE024)

III Year B.E(EEE) at Kamaraj College of Engineering and Technology, Madurai has successfully completed his Internship Training at our Company from 12<sup>th</sup> June 2023 to 12<sup>th</sup> July 2023.

We wish all success for his Future Endeavours.

Thanking You,

Yours Sincerely

S.V.Suraj Sundar Shankar  
Managing Partner



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# *Internship Certificate*

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*This is to certify that*

**K. VIJAYAKUMAR**

*Student of*

*B.E., (Electrical and Electronics Engineering) from  
Kamaraj College of Engineering and Technology, Virudhunagar*

*has Successfully Completed the Internship Training on*

*Web Development using PHP*

*Held From* 17-06-2023 *to* 04-07-2023

04-07-2023

*Dated*

*S. Thange pandian*  
*Authorized Signatory*





Department of Electrical and Electronics Engineering  
NATIONAL INSTITUTE OF TECHNOLOGY  
Tiruchirappalli - 620 015  
Tamil Nadu, India

PHONE (O): 0431-2503263  
Email: mvkirthiga@nit.edu

M.Venkata Kirthiga  
Professor

Date : 25.07.2023

**To Whomsoever It May Concern**

This is to certify that Ms. G. Keerthana pursuing B.Tech. in Electrical and Electronics Engineering at the Kamaraj College of Engineering and Technology, Viruthunagar, has successfully completed her summer internship for a period of 30 days between 5<sup>th</sup> June to 5<sup>th</sup> July 2023, on the topic, "OPTIMAL LOCATION IDENTIFICATION OF ELECTRIC VEHICLE CHARGING STATION IN A DISTRIBUTION SYSTEM".

Her contribution was and conduct was good during the period.

[M. VENKATAKIRTHIGA]



# Internship Certificate

This is to certify that

**J. Sudharsan**

A Student of B.T. (Electrical and Electronic Engineering) from  
**Kamaraj College of Engineering and Technology, Virudhunagar**  
has Successfully Completed the Internship Training on  
**Web Development using PHP**

Held from 08.05.2023 to 27.05.2023

25/05/2023  
Date:

**P. Sathish**  
Authorized Signatory  
(Dept. Manager)





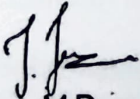
**FJS SERVICES**  
SERVE THE NATION WITH PASSION

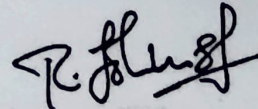
# **CERTIFICATE OF INTERNSHIP**

*This certificate is bestow to .....SUDHARSON :S.....*

*for the outstanding performance in the internship in.....*

*.....SOLAR...ENERGY..... conducted from 05.06.23.to.19.06.23*

  
M.D.

  
CEO



NEWAYS IT Solutions  
EXPECTATION UNLIMITED

# Internship Certificate

This is to certify that

N. Navaneethakrishnan

A Student of B.T., Electrical and Electronic Engineering, from  
Kamaraj College of Engineering and Technology, Virudhunagar

has Successfully Completed the Internship Training on

Web Development using PHP

Held from

08-05-2023

to

21-05-2023

21/05/2023  
Date

P. Subash

Authorized Signatory  
(Branch Manager)





**NBAYS IT Solutions**  
 EXPECTATIONS UNLIMITED

16/1/2023  
 08/05/2023

# Internship Certificate

This is to certify that

**N. Balamurugan**

A Student of B.T. (Electrical and Electronics Engineering) from  
**Kamaraj College of Engineering and Technology, Virudhunagar**  
 has Successfully Completed the Internship Training on  
**Web Development using PHP**

Held from 08.05.2023 to 21.05.2023

21/05/2023  
 Dated

*P. Sathish*  
 Authorized Signatory  
 (Branch Manager)



# Internship Certificate

This is to certify that

S. Mohamed kalith

A Student of B.E. (Electrical and Electronic Engineering) from

Kamaraj College of Engineering and Technology, Virudhunagar

has successfully completed the Internship Training on

Web Development using PHP

Held from 08.05.2023 to 21.05.2023

21/05/2023  
Date

P. Sathish

Authorized Signatory  
(Branch Manager)





**SENMALR INDIA ( OPC ) PVT LTD**

CIN NO: U40106TN2020OPC13410B

GSTIN: 33ABDCS3389P12P

Solar Energy Providers and EPC Consultants.

Website: [www.ssenmacsolar.in](http://www.ssenmacsolar.in)

Mail id : [senmacsolar@gmail.com](mailto:senmacsolar@gmail.com)

Mobile : 9486953596.

Ref: .....

Date: 26/06/23

TO WHOM-SO-EVER IT MAY CONCERN

Shri. K. SRI SANJAYRAM (Reg. No.: 20UEE033) is a student of Kamaraj College of Engineering & Technology studying in B.E Electrical and Electronics Engineering 3<sup>rd</sup> year worked under our supervision during his internship period (2 Weeks) in a spread over period of 07/06/2023 to 24/06/2023. We are pleased to state that he worked hard and evinced a scholastic bent of mind towards given work.

We wish him a great success in all his endeavors and career.

Madurai.

MANAGER

Senmac Solar India (P) Ltd  
Madurai.

C.E.O

Senmac Solar India (P) Ltd  
Madurai.



GST IN : 33BFMPP4264012G

Cell : 98436 02048  
95436 02048



# RATHI

## UV Curing Chambers

S/3056/6, Muniswaran Colony, SIVAKASI EAST - 626 189.

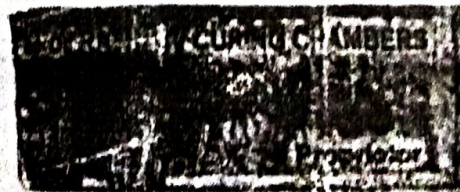
E-Mail Id : rathiuvc@gmail.com

Date 13.07.23.

### CERTIFICATE

This is to certify that Selvan s. LOGESH S/o K.SENTHIL Studying Third Year EEE in KAMARAJ College of Engineering and Technology, Virudhunagar. have undergone "Internship" in our firm during the period from 15.06.2023 to 12.07.2023 Successfully.

During the training period his Motivation are found *Good*



**RATHI UV CURING CHAMBERS**  
6/3056/6, Muniswaran Colony  
Muniswaran Road, SIVAKASI  
Virudhunagar District - 626189



TIN : 33BFMPP4264D1ZG

Cell : 98436 0204  
95436 0204



# RATHI

## UV Curing Chambers

5/3056/6, Muniswaran Colony, SIVAKASI EAST - 626 189.

E-Mail Id : rathiuvc@gmail.com

Date : 01.07.23

### CERTIFICATE

This is to certify that Selvan P. VIJAY S/o A. PARTHASARATHY Studying Third Year EEE in Kamaraj College of Engineering and Technology, Virudhunagar. have undergone "Internship" in our firm during the period from 05.07.2023 to 20.07.2023 Successfully.

During the training period his Motivation are found Good

**RATHI UV CURING CHAMBERS**  
5/3056/6, Muneeswaran Colony  
Naranapuram Road, SIVAKASI  
Virudhunagar District - 626 189

**For RATHI UV CURING CHAMBERS**

*K. Vijayaraj*  
Proprietor



GST IN : 33BFMPP4264D1ZG

Cell : 98436 02048  
95436 02048



**RATHI**

**UV Curing Chambers**

5/3056/6, Muniswaran Colony, SIVAKASI EAST - 626 189.

E-Mail Id : rathiuivcc@gmail.com

Date : 13.07.23

**CERTIFICATE**

This is to certify that Selvan **B. SRIDHAR** S/o **P. BASKAR** Studying Third Year EEE in **KAMARAJ College of Engineering and Technology, Virudhunagar.** have undergone "Internship" in our firm during the period from **15.06.2023** to **12.07.2023** Successfully.

During the training period his Motivation are found Good



**RATHI UV CURING CHAMBERS**  
5/3056/6, Muniswaran Colony  
Narasapuram Road, SIVAKASI  
Virudhunagar District - 626189



Cell : 94431 29440

# SRI VINAYAGA ELECTRICALS

ALL KINDS OF ELECTRICAL WORKS

No. 7, Thiruthangal Road, Rainbow Complex, SIVAKASI.

Date 06/07/2023

## To Whomsoever It May Concern

This is to certify that Mr.M.Rohith Raja.

S/o K.Muthuramalingam Studying 4<sup>th</sup> Year EEE in KAMARAJ College of Engineering & Technology is working with us Electrical Maintenance Work in our company. (Working Period 19/06/2023 to 05/07/2023).

We Hereby confirm that all above details is as per our record.

This letter is issued to him on his request and we don't accept any liability on behalf of this letter or part of this letter on our company. During the Training Period His Motivation are Found GOOD.

Thank You

For Sri VINAYAGA ELECTRICALLS,

(K. Muthuramalingam)