

IGNITE 2023



A DAILY NEWSLETTER

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STUDENT ACHIEVEMENT



Subhagnesh L, III year Biomedical Engineering Student, has successfully completed online certification course on **Java Programming** organized by **Great Learning Academy**.

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STUDENT PARTICIPATION



Mr. K. Karthik, III Yr, Mechanical has successfully completed the Internship at Tagros Chemicals India Private Limited, Chennai from 11.07.2023 to 20.07.2023

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STUDENT PARTICIPATION



Nithyasri V.G, IIIrd year Computer Science and Engineering student has completed internship training on “**Industrial Based Android Application Development with IOT**”, organized by NSIC - Technical Services Center from 26/6/2023 to 10/07/2023.

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STUDENT PARTICIPATION



Career Development

CERTIFICATE OF COMPLETION

This is to certify that

MS. SWETHA . M (REG NO: 312821104098)

has Successfully Completed

Internship / ~~Plant~~ training in ARTIFICIAL INTELLIGENCE from 10/07/23 to 26/07/23

During the training period the performance of the trainee was found to be excellent.

Congratulations on your hard work! keep shining!



K. S. Pichay
Jayalakshmi S
Vice president



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Swetha M, IIIrd year Computer Science and Engineering student has completed an internship in “**Artificial Intelligence**”, organized by DLK from 10/07/2023 to 26/07/2023.

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STUDENT PARTICIPATION



DLK

Career Development



CERTIFICATE OF COMPLETION

This is to certify that

MS. YASHWARTHINI . M (REG NO : 312821104108)

has Successfully Completed

Internship / ~~Implant~~ training in ARTIFICIAL INTELLIGENCE from 10/07/23 to 26/07/23

During the training period the performance of the trainee was found to be excellent.

Congratulations on your hard work! keep shining!



K.S. Ditya
Jayalakshmi S
Vice president



Yashwarthini.M, IIIrd year Computer Science and Engineering student has completed an internship in “**Artificial Intelligence**”, organized by DLK from 10/07/2023 to 26/07/2023.

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STUDENT PARTICIPATION



Forage

Inspiring and empowering
future professionals

Yuvanesh . s

**Data Visualisation: Empowering Business
with Effective Insights**

Certificate of Completion

July 31st, 2023

Over the period of July 2023, Yuvanesh . s has completed practical tasks in:

Framing the Business Scenario
Choosing the Right Visuals
Creating Effective Visuals
Communicating Insights and Analysis

Tom Brunskill
CEO, Co-Founder of
Forage

Enrolment Verification Code k5a4TAXTnbFv6mLgQ | User Verification Code 79HEusLRh3i5QANH | Issued by Forage

Yuvanesh S, IIIrd year Computer Science and Engineering student has completed an internship in “**Data Visualisation: Empowering Business with Effective Insights**”, organized by TATA Forage on 31st July 2023.

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STUDENT PARTICIPATION







Nelson S

Data Visualisation: Empowering Business with Effective Insights

Certificate of Completion
July 31st, 2023

Over the period of July 2023, Nelson S has completed practical tasks in:

- Framing the Business Scenario
- Choosing the Right Visuals
- Creating Effective Visuals
- Communicating Insights and Analysis



Tom Brunskill
CEO, Co-Founder of Forage

Nelson S, IIIrd year Computer Science and Engineering student has internship in “**Data Visualisation: Empowering Business with Effective Insights**”, organized by TATA Forage on 31st July 2023.

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STUDENT PARTICIPATION



A. L. Reshma Bee, I year student (CME), Department of Science and Humanities has completed the online course on **B001 – Photoelectric Sensors** offered by Omron Automation eLearning in the month of July 2023.

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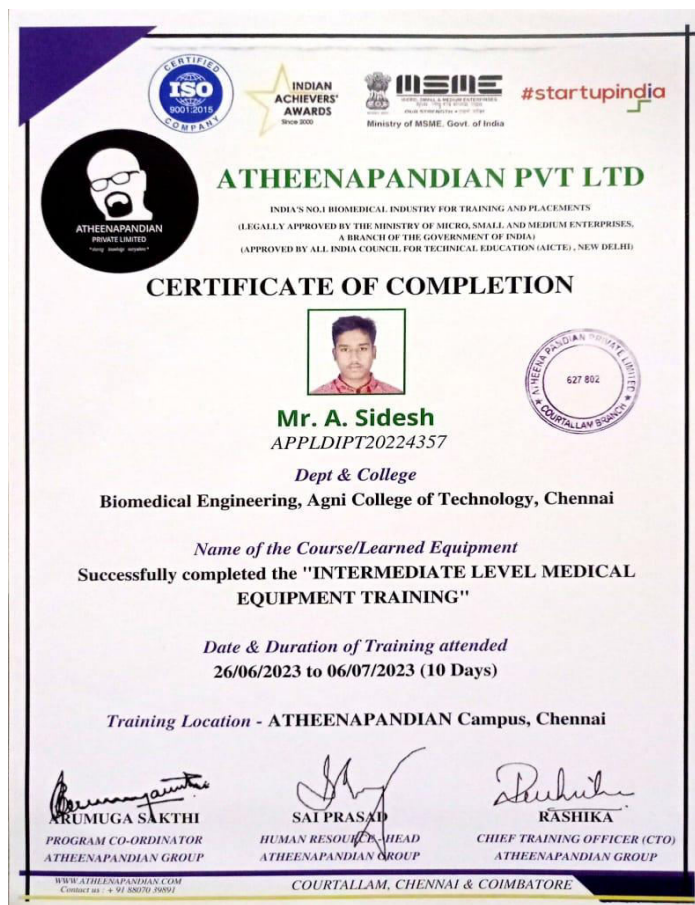


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EQUIPMENT TRAINING



Sidesh A, Third year Biomedical Engineering Student, has successfully completed 10 days of Intermediate level medical equipment training from 26th June 2023 to 6th July 2023 at **Atheena pandian Pvt Ltd**.

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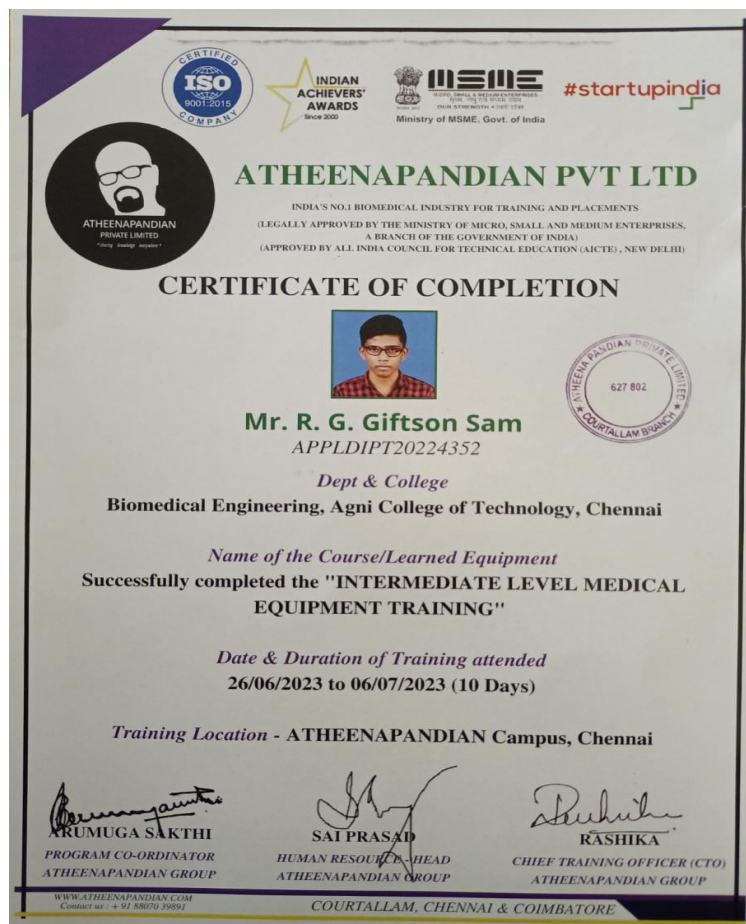
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EQUIPMENT TRAINING



Giftson Sam R. G., Third year Biomedical Engineering Student, has successfully completed 10 days of Intermediate level medical equipment training from 26th June 2023 to 6th July 2023 at **Atheena pandian Pvt Ltd.**

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FACULTY ACHIEVEMENT

Biomass Conversion and Biorefinery
https://doi.org/10.1007/s11399-023-04588-w

ORIGINAL ARTICLE



Mechanical and thermal properties of a waste fly ash-bonded Al-10 Mg alloy composite improved by bioceramic silicon nanoparticles

R. Venkatesh¹ · P. Sakthivel² · G. Selvakumar³ · A. Mohana Krishnan⁴ · P. Purushothaman⁵ · C. B. Priya⁶

Received: 31 March 2023 / Revised: 13 June 2023 / Accepted: 25 June 2023
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Abstract

The indispensable development of composites has changed the material trend, specifically in the engineering field, due to the combinations of more than one material in one structure, resulting in the improved permutation of properties such as toughness, high-temperature stability, good wear resistance, high strength and stiffness. This investigation is focused on fabricating the lightweight aluminium alloy composite reinforced with fly ash, and its mechanical and thermal properties were improved by the introduction of different weight percentages (1 wt%, 3 wt% and 5 wt%) of bioceramic silicon nanoparticles (SiNP_s) through the gravity stir cast technique. The composite density was evaluated by Archimedes' principle and found lightweight. The influences of multi-reinforcements and the nature of the particle distribution in the aluminium alloy matrix were analysed by scanning electron microscope (SEM), and the peaks of compounds were noted by X-ray diffraction analysis (XRD). The SEM result reveals an even distribution of fly ash particles with few agglomerations identified as various peak points of major compounds like aluminium (Al), silicon dioxide (SiO₂), magnesium oxide (MgO), titanium dioxide (TiO₂), alumina (Al₂O₃) and calcium oxide (CaO). The sample 4 hybrid nanocomposite shows the maximum tensile strength and hardness of 198 ± 1.03 Hv and 77 ± 1.22 Hv, respectively. The results from DSC analysis, 5 wt% of fly ash/1 wt% bioceramic SiNP-reinforced aluminium alloy composite (sample 2), found good thermal conductivity compared to other constitutions. The thermal adsorption effect on aluminium alloy nanocomposite (sample 4) with 15 wt% fly ash/5 wt% bioceramic SiNP content shows the maximum thermal stability on low mass loss.

Keywords Al-10 Mg · Fly ash · Bioceramic SiNP_s · Stir casting · SEM · Hardness · Tensile · Thermal conductivity · Thermal adsorption

✉ R. Venkatesh
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² Department of Mechanical Engineering, Sri Krishna College of Technology, Coimbatore 641042, Tamilnadu, India

³ Department of Mechanical Engineering, Kongu College of Engineering and Technology, Trichy 621215, Tamilnadu, India

⁴ Department of Mechanical Engineering, K. Ramakrishnan College of Engineering, Trichy 621112, Tamilnadu, India

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⁶ Department of Mechanical Engineering, OASYS Institute of Technology, Trichy 621006, Tamilnadu, India

Published online: 11 July 2023

1 Introduction

The engineering industries are finding lightweight-advanced materials with the better quality needed to fulfil their desired specific characteristics such as high strength to lightweight, good machinability, high stiffness, high corrosion resistance, good wear resistance, high thermal performance and economics [1, 2]. Despite several advantages of aluminium alloy-based matrix materials reinforced with organic and inorganic reinforcement, to serve better mechanical and tribological characteristics than conventional alloys [3–7]. Still, the automotive industries are forced to find new combinations of composite materials that reduce vehicle weight, increase fuel economy and reduce emissions. Moreover, weight reduction on more parts in a vehicle can reduce the volume production cost [8]. Most composites are prepared with ceramic reinforcement bonded by aluminium alloy via

Springer

Dr. P. Purushothaman, HoD/Mechanical has published a research work in a high quality peer-reviewed Journal “Biomass Conversion and Biorefinery” on the topic of “Mechanical and thermal properties of a waste fly ash-bonded Al-10 Mg alloy composite improved by bioceramic silicon nanoparticles”.

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FACULTY PARTICIPATION

CERTIFICATE of ACHIEVEMENT

This is to certify that

Saravanan K

has completed the course

Inspire Cast v2022 Video eLearning

June 14, 2023



Mr. K. Saravanan, AP/Mech., has participated and completed the course “Inspire Cast v2022 Video eLearning” on July 14, 2023 organized by ALTAIR.

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FACULTY PARTICIPATION



K. Balaji Sundharam, Assistant Professor, Department of S & H (English), has attended the Six days Faculty Development Programme on **"Empowering Innovators: Unleashing the Potential of Intellectual Property, Research Funding, Technology and Entrepreneurship"**, Organized by the Department of Electronics and Communication Engineering, Panimalar Engineering College, Chennai from 24-07-2023 to 29-07-2023.

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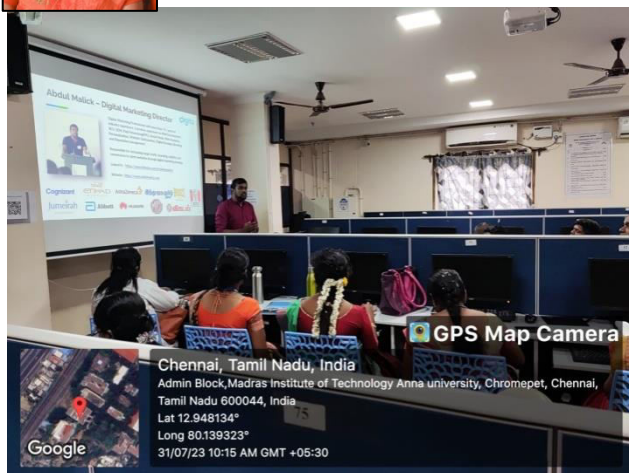
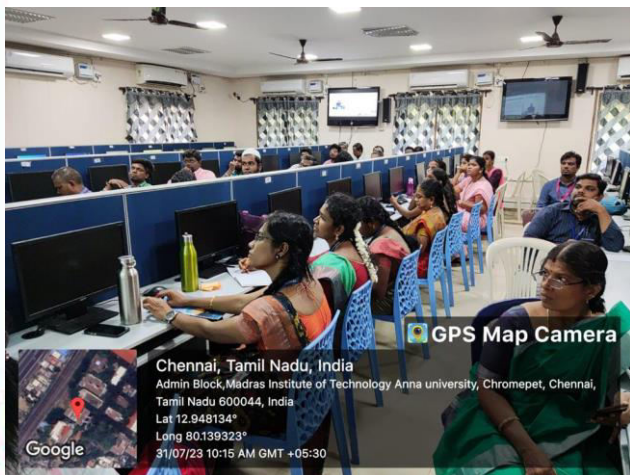
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FACULTY ACHIEVEMENT



Ms. S. Premiya, Assistant professor, Electronics and Communication Engineering has attended the Naan Mudhalvan faculty development program on “**Digital Marketing**” in Madras Institute of Technology, Chennai from 31st July to 4th August 2023.

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FACULTY PARTICIPATION



Dr.L.Sharmila, Professor and Head, Department of Computer Science and Engineering, has participated in Five Days National Seminar on **“Integration of AI and IOT Industry 4.0 towards Atmanirbar Bharat”** sponsored by SERB, organised by KCG college of Technology from 19th to 23rd June 2023.

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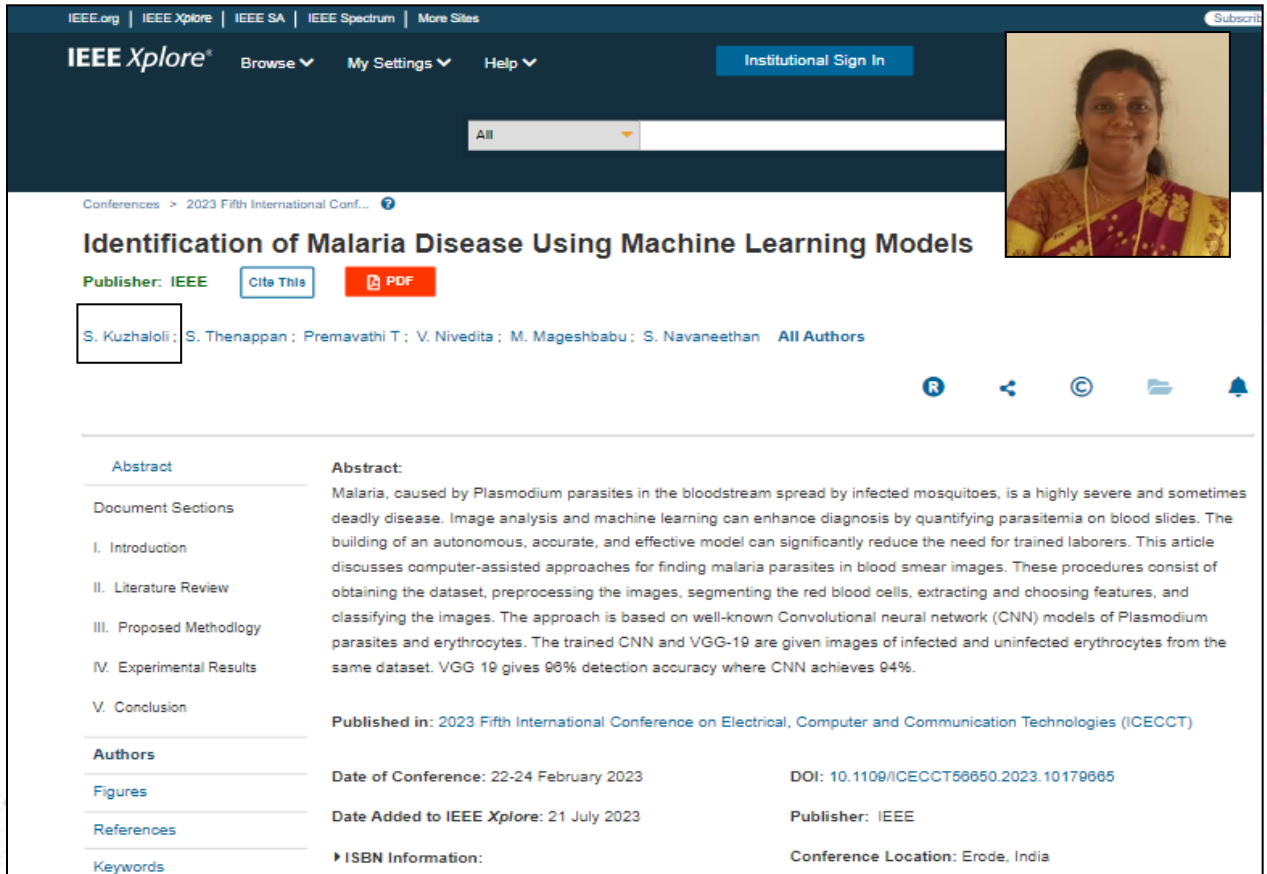


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The screenshot shows the IEEE Xplore digital library interface. At the top, there are navigation links for IEEE.org, IEEE Xplore, IEEE SA, IEEE Spectrum, and More Sites. The main header includes the IEEE Xplore logo, search filters (Browse, My Settings, Help), and an Institutional Sign In button. A profile picture of Dr. S. Kuzhaloli is visible in the top right corner. The article title is "Identification of Malaria Disease Using Machine Learning Models". Below the title, it indicates the publisher is IEEE and provides options to Cite This or Download PDF. The authors listed are S. Kuzhaloli, S. Thenappan, Premavathi T., V. Nivedita, M. Mageshbabu, S. Navaneethan, and All Authors. The abstract describes a machine learning approach for malaria diagnosis using blood smear images, comparing a trained CNN (96% accuracy) with a VGG-19 model (94% accuracy). The article was published in the 2023 Fifth International Conference on Electrical, Computer and Communication Technologies (ICECCCT) on February 22-24, 2023. The DOI is 10.1109/ICECCCT56650.2023.10179665. The publisher is IEEE, and the conference location is Erode, India.

Dr. S. Kuzhaloli, Associate Professor, Department of Mechatronics Engineering has published an article titled **Identification of Malaria Disease Using Machine Learning Models** in the **Fifth International Conference on Electrical, Computer and Communication Technologies (ICECCCT 2023)** and was published online in **IEEE Xplore** on 21st July 2023.

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ALUMNI INTERACTION

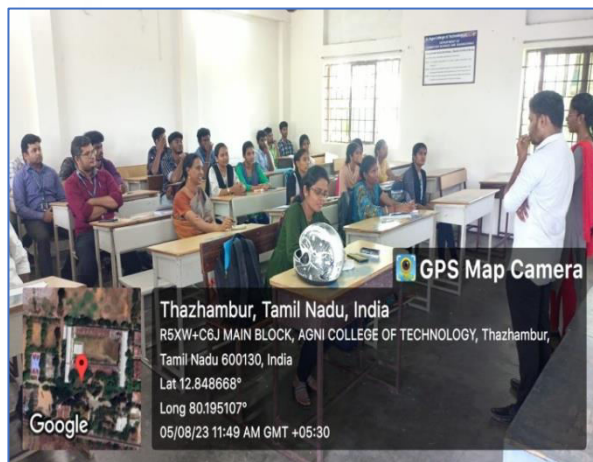
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Department of ECE
Alumni Interaction and Training Series -1

"How to crack Job Interview for Renault Nissan Technologies"
BY
Miss. Timila. R and Mr. Tavasi.B
ECE Alumni (2019-2023)
Renault Nissan Technology & Business centre (P) Ltd, Chennai



Department of Electronics and Communication Engineering organized an Alumni interaction and training series-1 on **"How to crack job interview for Renault Nissan Technologies"** for final year students by **Ms. R. Timila and Mr. B. Thavasi**, Trainee, Renault Nissan Technology & Business Centre, **ECE Alumni (2019-2023)** on 4th August 2023, Co-ordinated by Dr. Sree Rathna Lakshmi, Professor/Head, Dr. R. Ratheesh and Mr. K. Mohamed Ismail, Assistant Professors.

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ALUMNI TALK SERIES

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DEPARTMENT OF MECHATRONICS ENGINEERING

Organises
ALUMNI TALK SERIES
ON
"IMPORTANT TIPS & TRICKS FOR PLACEMENT IN RENAULT NISSAN"

5th Aug 2023 9 - 10.30 AM
SEMINAR HALL, AGNI COLLEGE OF TECHNOLOGY

Hearty Welcome...

Mr. B. JAWAHAR
MHT Alumni (2019-2023)
Engineer Trainee
Renault Nissan Technology & Business Centre (p) Ltd, Chennai

Department Placement Co-ordinator Mr. S.Karthikeyan AP/MHT	Alumni Co-ordinator Mr. T. Srinivasan AP/MHT	Convener Dr. R. Pandiyarajan Head MHT	Patron Dr. Srinivasan Alavandar PRINCIPAL, ACT
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The Department of Mechatronics Engineering organized **Alumni Talk Series on Important Tips and Tricks for Placement in Renault Nissan** for the final year students of Mechatronics, Mechanical & Automation and Mechanical Engineering on 5th August 2023 . **Mr. B. Jawahar, Engineer Trainee, Renault Nissan Technology & Business Centre (P) Ltd, Chennai, MHT Alumni (2019-2023),** delivered a talk and provided inputs on Resume Design, Self Introduction, Group discussion and HR rounds of Interview Process.

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ALUMNI ACTIVITY



Mr.Praveen Karthikeyan, President of Alumni Association has interacted to the Final year students on 5th August along with Mrs.G.Umadevi (Department Alumni Coordinator) regarding Alumni Association Membership, Placements and Training which would be conducted in the forthcoming days.

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