MARRI LAXMAN REDDY
INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AN AUTONOMOUS INSTITUTION)
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)
Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section2(f) & 12(B)of the UGC act,1956

ECE-DEPARTMENT
NEWS LETTER/MAGAZINE

ELECTRO PULSE

AY: 2024-25
JAN to JUNE 2025
Volume: 11

Mr. Marri Laxman Reddy - Chairman

"The pride of every student and staff would be in his/her college. A college reach heights of glory but without materials like college magazine the outside world may not know of it. The role of a college magazine is to promoting what an institute offers. It brings out into the open things which are unrevealed. It brings to light the names of the unsung heroes and their mighty deeds. I am happy that there is a dedicated team of staff and students who have brought out the magazine of our college. They have presented the stupendous achievements of Marri Laxman Reddy Institute of Technology and Management, in the fields of academics, research, sports and extra circular activities, in a nice way. Dazzle represents the collective work of team. I wish the magazine a grand success".

Dr. P. Sridhar Ph.D, M. Tech, MISTE **- Director**

"It is a great pleasure to see a creative expressions of students who had contributed to Electro Pulse, MLRITM has grown abundantly in the recent past. It continues to sustain its growth. People reading this magazine will realize the tremendous changes that are happening in the MLRITM campus. The magazine is presenting a glimpse of the growth of the institution on many fronts. The college has been simply unstoppable in its progress as it has been actively involved in various activities that have brought to light the hidden talents of the college students and staff. The highly qualified and dedicated members of staff have always stood shoulder with the management and have carried out their duties with a level of commitment. This magazine has recorded achievements of staff members and students. I wish the management, staff and students of the college success in their future endeavours".

Dr. R. Murali Prasad Ph. D, M. TECH, MISTE – **Principal**

"It gives me immense pleasure to extend my best wishes to the Department for maintaining the technical Magazine-Electro Pulse, which serves as a platform for students and faculty to showcase their innovative ideas, research contributions, and technical expertise. In today's rapidly evolving technological landscape, staying updated with emerging trends is crucial, and this magazine will foster knowledge-sharing and creativity among budding engineers. I encourage students to actively participate, explore new concepts, and contribute towards advancements in their respective fields. May this initiative continue to inspire and empower young minds for a brighter future".

Dr. N. Srinivas Ph. D, MIEEE, FIETE, LISTE – **HOD-ECE**

"I am happy to learn that MLRITM College of Engineering is coming out with the half yearly college magazine. Efforts such as this will provide an opportunity for the staff and students to participate in technical events, industrial visits, seminars, workshops, sports etc. Such value additions are very much essential for the young technocrats, engineers and scientists, to demonstrate their ideas for a developed India. I sincerely appreciate and congratulate the chairman, Principal, the editorial team and the entire management of the college for their unrelenting efforts in compiling this magazine".

Vision of the Institute

To be a globally recognized institution that fosters innovation, excellence, and leadership in education, research, and technology development, empowering students to create sustainable solutions for the advancement of society.

Mission of the Institute

To foster a transformative learning environment that empowers students to excel in engineering, innovation, and leadership.
To produce skilled, ethical, and socially responsible engineers who contribute to sustainable technological advancements and address global challenges.
To shape future leaders through cutting-edge research, industry collaboration, and community engagement.

Quality Policy

- Ensure excellence in education through innovative teaching and continuous improvement.
- Promote ethical, skilled, and employable graduates who drive sustainable technologies.
- Encourage research, industry collaboration, and community engagement for societal benefit.

Vision of the Department

To provide quality technical education in Electronics and Communication Engineering through research, innovation, striving for global recognition in specified domain, leadership, and sustainable societal solutions.

Mission of the Department

- **DM1:** To create a transformative learning environment that empowers students in electronics and communication engineering, fostering excellence in technical skills and leadership.
- **DM2:** To drive innovation through research, deliver a transformative education grounded in ethical principles, and nurture the development of professionals
- **DM3:** To cultivate strong industry partnerships, and engaging actively with the community for societal and technological progress.

Program Educational Objectives (PEO) for the UG Program

PEO 1: Have successful careers in Industry.

PEO 2: Show excellence in higher studies/ Research.

PEO 3: Show good competency towards Entrepreneurship.

Program Outcomes (POs) for the UG Program

Engineering Graduates will be able to:

1. **Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis**: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions**: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems**: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

5. **Modern tool usage**: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

6. **The engineer and society**: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

7. **Environment and sustainability**: Underst and the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

8. **Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. **Individual and team work**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. **Communication**: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. **Project management and finance**: Demonstrate knowledge and underst and ing of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. **Life-long learning**: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Specific Outcomes (PSOs) for the UG Program

1. **Professional Skills:** An ability to analyze and design analog & digital systems for a given specification and function.
2. **Problem-solving and Applications Skills:** An ability to solve and implement functional blocks of hardware-software co-designs problems for VLSI, signal processing and communication applications.
3. **Successful Career:** Gain the hands-on competency skills in Computing Tools for electronics and communication systems for the entry level position to meet the requirements of the Employer.

Program Educational Objectives (PEOs) for the PG program

PEO1: To achieve professional success in the embedded systems domains by applying technical knowledge in academic, industry and entrepreneurial roles.

PEO2: To excel in research and innovation through deep understanding of industrial needs and emerging technologies for developing real-world solutions.

PEO3: To improve knowledge and skills for career growth by upholding integrity and embracing lifelong learning globally.

PEO4: To exhibit leadership, professionalism, and communication skills in multidisciplinary towards the sustainable development.

Program Outcomes (POs) for the PG program

1. **Research / Investigation:** An ability to independently carry out research /investigation and development work to solve practical problems.
2. **Report Preparation:** An ability to write and present a substantial technical report/document
3. **Domain Mastery (Embedded Systems):** Students should be able to demonstrate a degree of mastery in Embedded Systems
4. **Application of Engineering Principle:** Acquire and apply engineering principles to design embedded systems and processes that address complex real-world problems.
5. **Modern Tools & Societal Impact:** Use modern tools to conduct experiments, apply technical skills, and develop solutions for societal challenges and sustainable development.
6. **Lifelong Learning & Adaptability:** Recognize the value of lifelong learning and proactively engage in ongoing professional development by embracing and integrating emerging technologies.

EDITORIAL TEAM	
Chief Editor	**Dr. N. Srinivas**
Faculty Coordinators	Dr. B. Koteswara Rao Mrs. P. Sandhya
Student Coordinators	Ms. K. Apoorva (UG) Mr. K. Anil Kumar (PG)
Publisher	Marri Laxman Reddy Institute of Technology and Management

FACULTY ACHIEVEMENTS AND AWARDS FOR DECEMBER MONTH

Proud to announce that R Raja Kishore, Assistant Professor of ECE Department received a Reviewer Certificate, on 6th January for the event IEEE ICMAC 2024 conducted from 19th December to 21st December at VNR VJIET.

Proud to announce that Dr. N Srinivas sir, Professor and HOD of ECE Department received a Reviewer Certificate, on 6th January for the event IEEE ICMAC 2024 conducted from 19th December to 21st December at VNR VJIET and Mrs. S. K. Hima Bindhu Assistant Professor of ECE Department received a Reviewer

Certificate, for the event IEEE IC3ECSBHI 2024 conducted from 16th January to 18th at Gautam buddha University, Greater Noida UP.

EVENTS ORGANIZED

Mrs. Nagajyothi, Assistant Professor of ECE Department organized a Two-day Guest lecture on Applications Mathematics in Machine Learning on 24th and 25th January with 50 participants.

FACULTY ATTENDED FDP

Dr. N. Srinivas Professor, Mr. K. N. Bhushan Assistant Professor, B. Koteswara Rao Assistant Professor, V. Koteswara Rao Assistant Professor, S. K. Hima Bindhu Assistant Professor, R. Raja Kishore Assistant Professor, Dr. I. Adum Babu Associate Professor, B. N. Srinivas Assistant Professor of ECE department participated in the One Day Workshop on PG Certification course on AI and ML on 31st January in Delhi.

FACULTY INVOLVEMENT IN COMMUNITY DEVELOPMENT AND SOCIAL RESPONSIBILITY

Anil kumar. A, Assistant Professor from ECE department has participated in Anti-Drug Awareness campaign organized by Marri Laxman Reddy Institute of Technology and Management on 28th January.

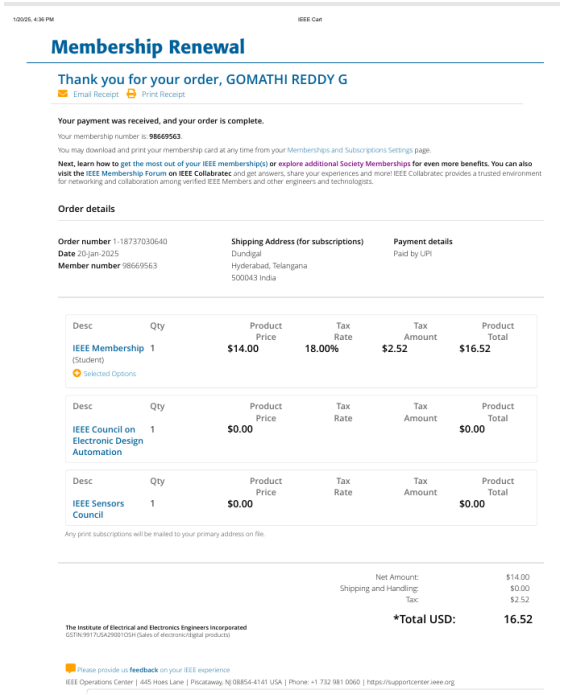
STUDENT INTERNSHIPS/ STUDENT CERTIFICATIONS

Kannithi Naresh bearing roll number 227Y1A04F5 has attended a 10 week Google Android Developer Virtual Internship online course from October to December and received the certificate in January.

K. Indu Priya bearing hall ticket number 237Y1A0408 completed the course Pointers in C Programming on January 8, 2025 and also completed the course Python Clean Coding on January 24, 2025 in INFOSYS.

STUDENT AND FACULTY MEMBERSHIPS IN PROFESSIONAL BODIES:

Gomathi a final year student bearing hall ticket number 217Y1a0417 purchased student IEEE membership with membership ID: 98669563 on 20th January.



Membership Renewal

Thank you for your order, GOMATHI REDDY G

Email Receipt Print Receipt

Your payment was received, and your order is complete.

Your membership number is 98669563.

You may download and print your membership card at any time from your Memberships and Subscriptions Settings page.

Next, learn how to get the most out of your IEEE membership(s) or explore additional Society Memberships for even more benefits. You can also visit the IEEE Membership Forum on IEEE Collabratec and get answers, share your experiences and more! IEEE Collabratec provides a trusted environment for networking and collaboration among verified IEEE Members and other engineers and technologists.

Order details

Order number 1-18737030640
Date 20-Jan-2025
Member number 98669563

Shipping Address (for subscriptions)
Dundigal
Hyderabad, Telangana
500043 India

Payment details
Paid by UPI

Desc	Qty	Product Price	Tax Rate	Tax Amount	Product Total
IEEE Membership (Student) Selected Options	1	$14.00	18.00%	$2.52	$16.52
IEEE Council on Electronic Design Automation	1	$0.00			$0.00
IEEE Sensors Council	1	$0.00			$0.00

Any print subscriptions will be mailed to your primary address on file.

Net Amount: $14.00
Shipping and Handling: $0.00
Tax: $2.52
*Total USD: 16.52

The Institute of Electrical and Electronics Engineers Incorporated
GSTIN:9917USA29001OSH (Sales of electronic/digital products)

Please provide us feedback on your IEEE experience

IEEE Operations Center | 445 Hoes Lane | Piscataway, NJ 08854-4141 USA | Phone: +1 732 981 0060 | https://supportcenter.ieee.org

PLACEMENTS

Congratulations to the two students Savitri and Akanksha got selected in Kodebloom Company from ECE department on 23rd January.

EXTRA-CURRICULAR ACTIVITIES

D. Nithin bearing hall ticket number 227Y1A04G0, K. Chandra bearing hall ticket number 227Y1A04D9, N. Rahul bearing hall ticket number 227Y1A04G5, B. Venu bearing hall ticket number 227Y1A0464, H. Karthik bearing hall ticket number 227Y1A04E8, from ECE department participated in the Volleyball competition held at BVRIT college and won the second prize.

FACULTY ACHIEVEMENTS AND AWARDS

Proud to announce that Dr. N Srinivas, Professor and HOD of ECE department received a Reviewer Certificate, on 13th February for the event titled Transactions on Emerging- Telecommunication Technologies at Wiley.

WILEY

Reviewer Certificate

This certificate is awarded to

SRINIVAS NALLAGONDA

for serving as a reviewer for

Transactions on Emerging Telecommunications Technologies

Thank you for reviewing 4 manuscripts in 2024

13 February 2025

Changqiao Xu
Editor-in-Chief

Proud to announce that Dr. K. Manikanta, Assistant Professor of ECE Department received Best Young Researcher Award, on 28th February for the event titled Knowledge Research Academy at Coimbatore, Tamil Nadu.

Knowledge Research Academy
Coimbatore, Tamil Nadu
(An MSME Registered Organization)
UDYAM-TN-03-0021905

National Award Ceremony
on
National Science Day Awards (NSD - 2025)

BEST YOUNG RESEARCHER AWARD

This Certificate of Excellence is awarded to

Dr. K. Manikanta
Assistant Professor,
Department of ECE,
Marri Laxman Reddy Institute of Technology and Management, Telangana

in recognition of his outstanding contribution in Research

28th February 2025

Certificate No: NSD/2025/C13

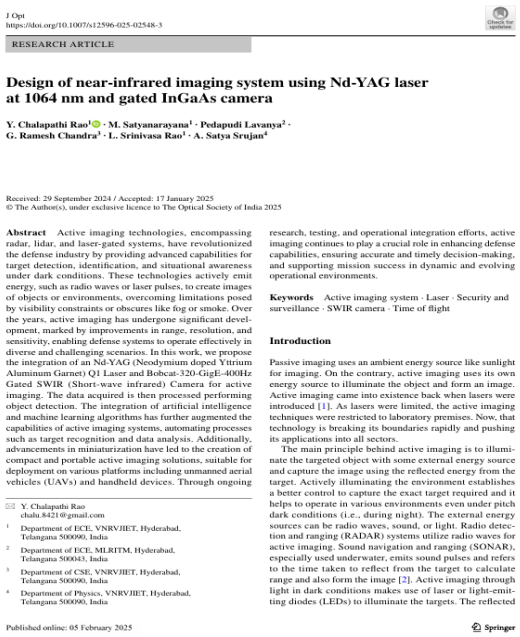
Director

EVENTS ORGANIZED

Dr. N. Srinivas, Professor and HOD of ECE Department organized Antenna Design Using HFSS on 24th February with 80 participants.

PAPER PUBLISHED IN JOURNALS

Pedapudi Lavanya Assistant Professor, of ECE department published an online paper in the SCI/Scopus indexed journal in February titled Design of near-infrared imaging system using Nd-YAG laser at 1064 nm and gated InGaAs camera.



J Opt
https://doi.org/10.1007/s12596-025-02548-3

RESEARCH ARTICLE

Design of near-infrared imaging system using Nd-YAG laser at 1064 nm and gated InGaAs camera

Y. Chalapathi Rao[1] · M. Satyanarayana[1] · Pedapudi Lavanya[2] · G. Ramesh Chandra[3] · L. Srinivasa Rao[1] · A. Satya Srujan[4]

Received: 29 September 2024 / Accepted: 17 January 2025
© The Author(s), under exclusive licence to The Optical Society of India 2025

Abstract Active imaging technologies, encompassing radar, lidar, and laser-gated systems, have revolutionized the defense industry by providing advanced capabilities for target detection, identification, and situational awareness under dark conditions. These technologies actively emit energy, such as radio waves or laser pulses, to create images of objects or environments, overcoming limitations posed by visibility constraints or obscures like fog or smoke. Over the years, active imaging has undergone significant development, marked by improvements in range, resolution, and sensitivity, enabling defense systems to operate effectively in diverse and challenging scenarios. In this work, we propose the integration of an Nd-YAG (Neodymium doped Yttrium Aluminum Garnet) Q1 Laser and Bobcat-320-GigE-400Hz Gated SWIR (Short-wave infrared) Camera for active imaging. The data acquired is then processed performing object detection. The integration of artificial intelligence and machine learning algorithms has further augmented the capabilities of active imaging systems, automating processes such as target recognition and data analysis. Additionally, advancements in miniaturization have led to the creation of compact and portable active imaging solutions, suitable for deployment on various platforms including unmanned aerial vehicles (UAVs) and handheld devices. Through ongoing research, testing, and operational integration efforts, active imaging continues to play a crucial role in enhancing defense capabilities, ensuring accurate and timely decision-making, and supporting mission success in dynamic and evolving operational environments.

Keywords Active imaging system · Laser · Security and surveillance · SWIR camera · Time of flight

Introduction

Passive imaging uses an ambient energy source like sunlight for imaging. On the contrary, active imaging uses its own energy source to illuminate the object and form an image. Active imaging came into existence back when lasers were introduced [1]. As lasers were limited, the active imaging techniques were restricted to laboratory premises. Now, that technology is breaking its boundaries rapidly and pushing its applications into all sectors.

The main principle behind active imaging is to illuminate the targeted object with some external energy source and capture the image using the reflected energy from the target. Actively illuminating the environment establishes a better control to capture the exact target required and it helps to operate in various environments even under pitch dark conditions (i.e., during night). The external energy sources can be radio waves, sound, or light. Radio detection and ranging (RADAR) systems utilize radio waves for active imaging. Sound navigation and ranging (SONAR), especially used underwater, emits sound pulses and refers to the time taken to reflect from the target to calculate range and also form the image [2]. Active imaging through light in dark conditions makes use of laser or light-emitting diodes (LEDs) to illuminate the targets. The reflected

Y. Chalapathi Rao
chalu.8421@gmail.com

[1] Department of ECE, VNRVJIET, Hyderabad, Telangana 500090, India
[2] Department of ECE, MLRITM, Hyderabad, Telangana 500043, India
[3] Department of CSE, VNRVJIET, Hyderabad, Telangana 500090, India
[4] Department of Physics, VNRVJIET, Hyderabad, Telangana 500090, India

Published online: 05 February 2025

Springer

FACULTY INVOLVEMENT IN COMMUNITY DEVELOPMENT AND SOCIAL RESPONSIBILITY

Anil kumar. A, Assistant Professor from ECE department has participated in Anti-Drug Awareness campaign organized by Marri Laxman Reddy Institute of Technology and Management on 28th January.

Certificate
— OF ENROLLMENT —

On the International Day Against Drug Abuse & Illicit Trafficking held on 26-June-2024.

This is to certify that
A.ANIL KUMAR

has taken the pledge to fight against Narcotics under Mission Parivartana. He/She has joined the group of Anti-Drug Soldiers, an initiative of Telangana Anti-Narcotics Bureau (TGANB) towards building a drug-free generation.

MISSION PARIVARTHANA

Director
Telangana Anti Narcotics Bureau
TGANB

Director
Department for Empowerment of Persons with Disabilities, Senoir Citizens & Transgender Persons

RESEARCH GRANTS SANCTIONED BY GOVT./INDUSTRIES/NON-GOVT. ORGANIZATIONS:

Dr. N. Srinivas, Professor and HOD of ECE department, received in reference to ATAL FDP application no. 1714579181. The amount of Rs. 32,600/- has been released from AICTE to your institute on dated 06.02.2025 vide cheque no.- 584672.

3/8/25, 10:41 PM Gmail - MARRI LAXMAN REDDY INSTT. OF TECH. AND MGMT.-Released the payment of 2nd installment FDP AY 2024-25-r...

Gmail Srinivas Nallagonda <srinivas.nallagonda@gmail.com>

MARRI LAXMAN REDDY INSTT. OF TECH. AND MGMT.-Released the payment of 2nd installment FDP AY 2024-25-reg.
1 message

atal1 <atal1@aicte-india.org> Fri, Feb 7, 2025 at 4:08 PM
To: Srinivas Nallagonda <srinivas.nallagonda@gmail.com>, srinivas.nallagonda@mlritm.ac.in, adumbabu@mlritm.ac.in

Sir/Madam,

Institute name- MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT

A.ID-1714579181

In reference to ATAL FDP application no. **1714579181**. The amount of Rs. **32,600/-** has been released from AICTE to your institute on dated **06.02.2025** vide cheque no.- **584672**. Your ATAL FDP is settled from AICTE for the F.Y. 2024-25. Please find enclosed sanction letters for your reference and download the Coordinator & Co-Coordinator Certificate.

Marri Laxman-Letter.PDF
157K

STUDENT INTERNSHIPS/ STUDENT CERTIFICATIONS:

Y. Koushik Kumar bearing roll number 237Y1A0414 has completed the AICTE and 'VOIS for Tech University Engagement Program' led Virtual Internship on 'Block chain Technology' online course from 10th January 2025 to 05th February 2025.

STUDENT PARTICIPATION IN INTER-INSTITUTE CONFERENCES / WORKSHOPS/ SEMINARS/HACKATHONS:

Vadla Abhinay bearing hall ticket number 227Y1A0402, Buddol Dinesh Reddy bearing hall ticket number 227Y1A0411, Juttu Madhu bearing hall ticket number 227Y1A0429, participated in Design and Entrepreneurship (IDE) Bootcamp from 17th February to 21st February at Gyan Ganga Institute of technology and Sciences, Jabalpur organized by AICTE and Ministry of education.

Bakki Mahesh has successfully participated in Cloud Quest One Day Hackthon at Marri Laxman Reddy Institute of technology and Management organized by Syntoquest private limited on 01-02-2025.

CERTIFICATE OF PARTICIPATION

This Certificate is presented to

Bakki Mahesh

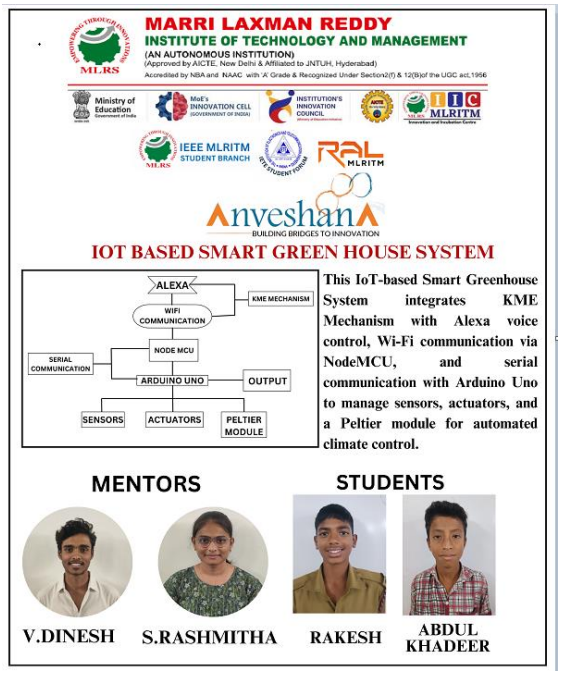
has successfully participated in CLOUDQUEST ONE-DAY HACKATHON at MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT, DUNDIGAL organized by SYNTHOQUEST PRIVATE LIMITED on 01-02-2025. During this event, the participant showcased innovative problem-solving skills, technical expertise, and teamwork while addressing real-world challenges in cloud computing.

Signature.

STUDENTS PROJECT PRESENTATIONS/ DESIGN CHALLENGES / PROFESSIONAL SOCIETIES:

P.Sai manoj bearing hall ticket number 247Y5A0422, A.Harish bearing hall ticket number 247Y5A0401, received an award for the contest Anveshana 2025 A Regional level Science engineering Fair on 7th February 2025 for the title Wireless Power Transmission.

V.Dinesh bearing hall ticket number 227Y1A04E2, S.Rashmitha bearing hall ticket number 247Y5A0425 , received an award for the contest Anveshana 2025 A Regional level Science engineering Fair on 7th February 2025 for the title IoT Based Smart Green Systems.

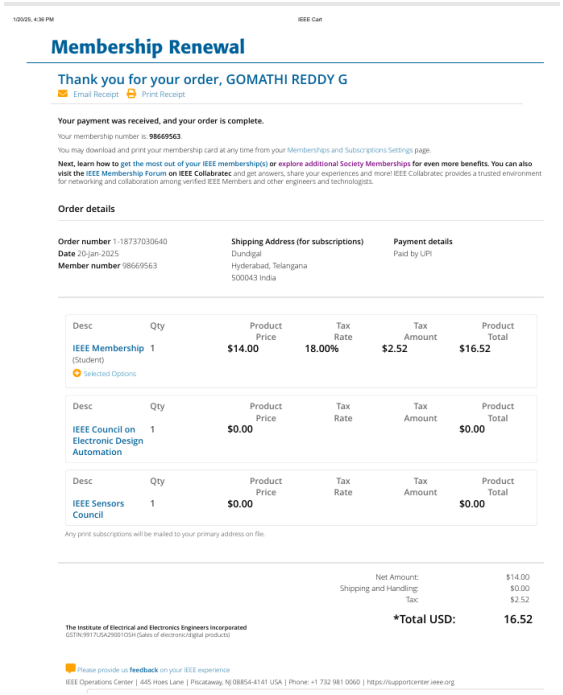


PROJECT PRESENTATIONS

Two Students N.Saiteja and N.Karthik reddy bearing hall ticket numbers 237Y1A04H0 and 247Y5A0419 participated in the National Science Day-2025, Technical Conference on 28th February at MARRI LAXMAN REDDY INSTITUTE OF PHARMACY on the topic Smart Home Automation by using KME Smart.

STUDENT AND FACULTY MEMBERSHIPS IN PROFESSIONAL BODIES

Gomathi a final year student bearing hall ticket number 217Y1a0417 purchased student IEEE membership with membership ID: 98669563 on 20th January.



Membership Renewal

Thank you for your order, GOMATHI REDDY G

Email Receipt Print Receipt

Your payment was received, and your order is complete.

Your membership number is: 98669563.

You may download and print your membership card at any time from your Memberships and Subscriptions Settings page.

Next, learn how to get the most out of your IEEE membership(s) or explore additional Society Memberships for even more benefits. You can also visit the IEEE Membership Forum on IEEE Collabratec and get answers, share your experiences and more! IEEE Collabratec provides a trusted environment for networking and collaboration among verified IEEE Members and other engineers and technologists.

Order details

Order number 1-18737030640
Date 20-Jan-2025
Member number 98669563

Shipping Address (for subscriptions)
Dundigal
Hyderabad, Telangana
500043 India

Payment details
Paid by UPI

Desc	Qty	Product Price	Tax Rate	Tax Amount	Product Total
IEEE Membership (Student)	1	$14.00	18.00%	$2.52	$16.52
IEEE Council on Electronic Design Automation	1	$0.00			$0.00
IEEE Sensors Council	1	$0.00			$0.00

Any print subscriptions will be mailed to your primary address on file.

Net Amount: $14.00
Shipping and Handling: $0.00
Tax: $2.52
*Total USD: 16.52

The Institute of Electrical and Electronics Engineers Incorporated

Please provide us feedback on your IEEE experience

IEEE Operations Center | 445 Hoes Lane | Piscataway, NJ 08854-4141 USA | Phone: +1 732 981 0060 | https://supportcenter.ieee.org

PLACEMENTS

Congratulations to the two students Savitri and Akanksha got selected in Kodebloom Company from ECE department on 23rd January.

Mariyala Rajesh (237Y1D5501) secured a placement at Kalvi Career Education Private Limited on 14-06-2025 with a package of 6 LPA. Dharsinala Harikrishna (217Y1D5501) was placed at Granules Life Sciences Private Limited on 09-09-2025. Potluri Ravija (217Y1D5503) also secured a placement at Infosys BPM Limited on 28-04-2025.

FACULTY ACHIEVEMENTS AND AWARDS

Proud to announce that Dr. N. Srinivas, Professor and HOD of ECE department, is recognized as a Top Cited Article on 19th March for the event International Journal Communication System.

EVENTS ORGANIZED

Dr. N. Srinivas, Professor and HOD of ECE Department organized Star Alumni Interaction Program on 1st March with resource person Mr. P. Sai Manohar, Embedded Engineer, Qualcomm, Hyderabad and on 8th March with resource person Mr. Sarath Sashidharan, Assistant TCS Consultant at synergy park, where almost around 50 students participated.

PAPER PUBLISHED IN CONFERENCES:

Nagababu Chekuri Assistant Professor, of ECE department attended an International Conference ICMVRCET - 2025 on March 21st and 22nd Kanchikacher la(M),NTR Dist. A.P, where his paper got published in the Scopus indexed journal titled Real Time Design of FPGA-Based

Home Automation Scheme.


M V R College of Engineering and Technology (MVRCET)

1st International Conference on Microstructure, VLSI, Robotics, Communication, Electrical & Emerging Technologies using AI-ML Algorithms (ICMVRCET - 2025)

CERTIFICATE OF PRESENTATION

This is to certify that Nagababu Chekuri of MLRITM, Hyderabad, Telangana presented a paper entitled "Real Time Design of FPGA-Based Home Automation Scheme" with Paper id: 30 in "First International Conference on Microstructure, VLSI, Robotics, Communication, Electrical & Emerging Technologies using AI-ML Algorithms" (ICMVRCET - 2025) during 21 - 22 March 2025 in association with Taylor & Francis.

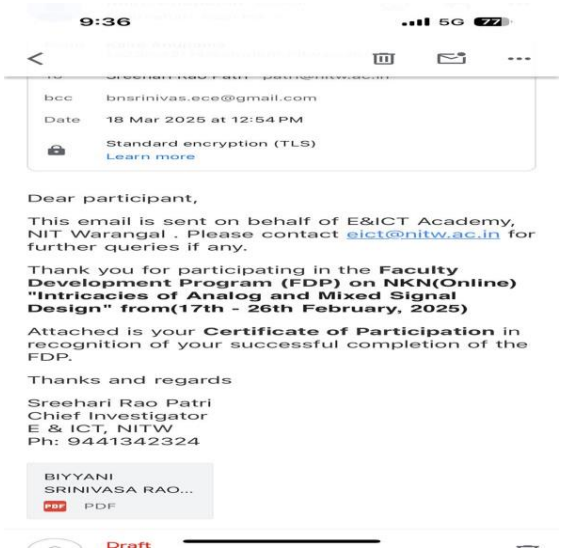
Industry Sponsor

2025

Conference Chair

Faculty ATTENDED FDP

B. N. Srinivas, Assistant Professor from ECE department has attended the FDP Intricacies of Analog & Mixed Signal IC Design conducted by NIT Warangal from 17th February t 22nd February and Received the Certificate on 18th March for his participation.


9:36

bcc bnsrinivas.ece@gmail.com

Date 18 Mar 2025 at 12:54 PM

Standard encryption (TLS)
Learn more

Dear participant,

This email is sent on behalf of E&ICT Academy, NIT Warangal . Please contact eict@nitw.ac.in for further queries if any.

Thank you for participating in the **Faculty Development Program (FDP) on NKN(Online) "Intricacies of Analog and Mixed Signal Design" from(17th - 26th February, 2025)**

Attached is your **Certificate of Participation** in recognition of your successful completion of the FDP.

Thanks and regards

Sreehari Rao Patri
Chief Investigator
E & ICT, NITW
Ph: 9441342324

BIYYANI SRINIVASA RAO...
PDF

Draft


Ten Days Online Winter Faculty Development Program On

Intricacies of Analog & Mixed Signal IC Design

Jointly Organized by Electronics & ICT Academies

NIT Warangal IIT Roorkee IIT Guwahati MNIT Jaipur NIT Patna IIITDM Jabalpur

Certificate of Participation

This is to certify that Mr. BIYYANI SRINIVASA RAO ASSOCIATE PROFESSOR From MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY & MANAGEMENT Has participated in a Ten Days Online Winter Faculty Development Program on "Intricacies of Analog & Mixed Signal IC Design" jointly organized by Electronics & ICT Academies held from 17th – 26th February, 2025 through National Knowledge Network under the "Scheme of Financial assistance for setting up of Electronics & ICT Academies" by the Ministry of Electronics and Information Technology (MeitY), Government of India. This Programme is endorsed by AICTE/UGC/NBA

Prof. P. Sreehari Rao, Principal Coordinator, NIT Warangal
Prof. Sanjeev Manhas, Joint Principal Coordinator, IIT Roorkee
Prof. Gaurav Trivedi, Joint Principal Coordinator, IIT Guwahati
Dr. Monika Yadav, Joint Principal Coordinator, MNIT Jaipur
Dr. Bal Chand Nagar, Joint Principal Coordinator, NIT Patna
Dr. Anil Kumar, Joint Principal Coordinator, IIITDM Jabalpur

STUDENT INTERNSHIPS/ STUDENT CERTIFICATIONS:

M. Tharuni bearing roll number 237Y1A0451 has completed 10 weeks AI-ML Virtual Internship provided AWS Academy during January 2025 to March 2025.


NATIONAL INTERNSHIP PORTAL

EduSkills Nation Building Through Skills

2025

Certificate of Virtual Internship

This is to certify that

THARUNI MARRU

Marri Laxman Reddy Institute of Technology and Management

has successfully completed 10 weeks

AI-ML Virtual Internship

During January - March 2025

We wish him / her all the best for the future endeavours

Curriculum Provided by:

aws academy

Shri Buddha Chandrasekhar, Chief Coordinating Officer (CCO), NEAT Cell, AICTE

Dr. Satya Ranjan Biswal, Chief Technology Officer (CTO), EduSkills

Certificate ID :e9ecc1d6591f0f3c38d60c2ac255367

Student ID :STU67971c7758f41737956471

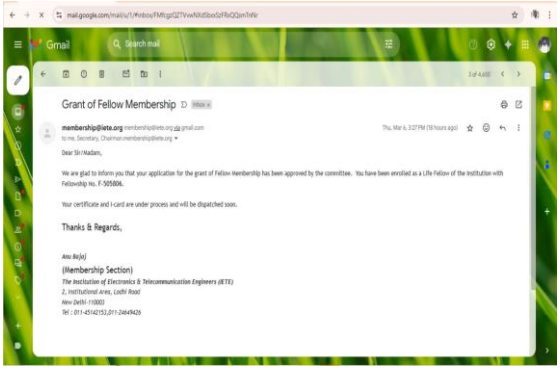
Darsh Patel bearing roll number 237Y1A0475 has completed 10 weeks AI-ML Virtual Internship provided AWS Academy during January 2025 to March 2025.

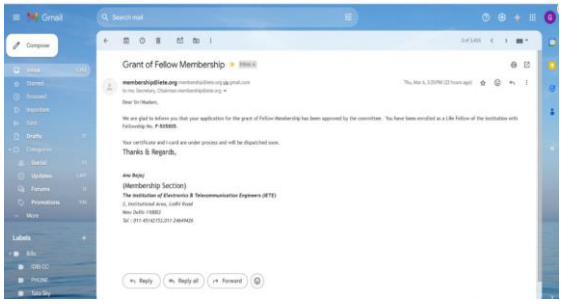
Narayanacharya bearing roll number 237Y1A0488 has completed 10 weeks AI-ML Virtual Internship provided AWS Academy during January 2025 to March 2025.

Rapolu Vivek Kumar bearing roll number 237Y1A0459 has completed 10 weeks AI-ML Virtual Internship provided AWS Academy during January 2025 to March 2025 and also received participation certificate on completion of 3 day program from March 3rd to 5th March of Eduskill Tech camp on Google AI-ML.

STUDENT AND FACULTY MEMBERSHIPS IN PROFESSIONAL BODIES:

Dr. N. Srinivas, G. Siva Sankar Varma and B. Koteswara Rao has been granted for their approval of IETE memberships on 6th March.





4/4/25, 9:04 PM Gmail - Your Membership Confirmation

Gmail Srinivas Nallagonda <srinivas.nallagonda@gmail.com>

Your Membership Confirmation
1 message

IEEE Order Confirmation <noreply@ieee.org> Mon, Mar 3, 2025 at 9:24 PM
To: srinivas.nallagonda@gmail.com

IEEE

Dear SRINIVAS NALLAGONDA:

Thank you for renewing your IEEE membership and for your continued commitment to the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity.

Download and print your membership card at any time from your IEEE Account Profile.

Some of the benefits included with your IEEE Membership include:

- *IEEE Spectrum* – our flagship publication, keeping you informed about major trends and developments in technology, engineering, and science.
- IEEE Collabratec® – download your 2025 membership certificate, serve as or find a mentor, join communities to engage in technical discussions, or create a group to collaborate on research and projects.
- IEEE.tv – the award-winning, internet-based television network with more than 3,000 programs and live streaming coverage of IEEE events and conferences.
- Career and Job resources – a wide range of learning, career enhancement, and employment opportunities.
- Awards and opportunities – learn more about student awards, competitions, and other opportunities to get actively involved.
- Member discounts – exclusive and discounted pricing on products and services (where available) that can add up to substantial savings.

View a full list of IEEE member benefits at www.ieee.org/benefits or www.ieee.org/start.

In addition to personal benefits, your membership helps support IEEE core purpose to foster technological innovation and excellence for the benefit of humanity. Specifically, this enables affordable student membership, funds university program accreditation, and helps introduce technology careers to young people around the world.

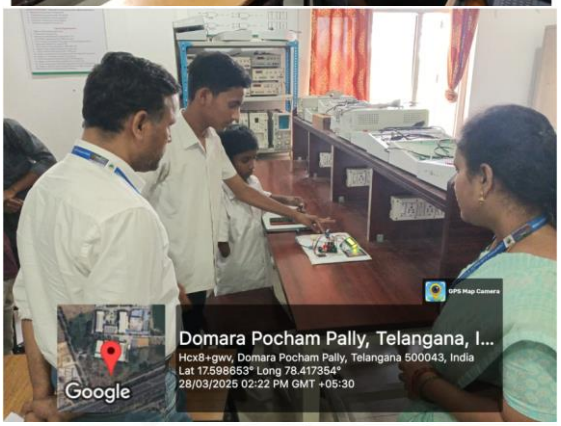
Please review the details of your order below. Retain a copy of this order confirmation for your records. To obtain a detailed receipt, visit www.ieee.org/go/receipt.

Sincerely,

IEEE Membership Team

Order Details

Description	Quantity	Product Price	Tax Rate	Tax Amount	Product Total
IEEE Young Professionals Website: http://www.ieee.org/yp	1	$0.00			$0.00



PROFESSIONAL BODIES / TECHNICAL ASSOCIATION ORGANIZING EVENTS:

A National Level Tech Fest “Valarous Tech Fest” is conducted by the Department of Electronics and Communication Engineering on 28th and 29th March with different events where almost around 300 participants from different colleges attended and made a huge success in this academic Year.

Below are few photos of students participating in different activities.

CO-CIRCULAR ACTIVITIES Activities (GATE RANKS/ GRE/ TOFEL/ PGCET/ NET/SLET etc.

J. Anjali bearing hall ticket number 227Y1A04D5, V. Nishitha bearing hall ticket number 227Y1A04F8, S. Sachin bearing hall ticket number 227Y1A04A6, Geethanjali bearing hall ticket number 227Y1A0414, Ch. Madhu bearing hall ticket number 227Y1A04F1, A. Apporva bearing hall ticket number 227Y1A0423 from ECE department qualified in the Gate Exam on 19th March.

EXTRA-CURRICULAR ACTIVITIES

A. Harish bearing hall ticket number 247Y5A0401 has participated in the chess competition on 6th and 7th March.

FACULTY ACHIEVEMENTS AND AWARDS:

Proud to announce that Dr. N Srinivas, Professor and HOD of ECE department received a Reviewer Certificate, on 3rd April for the event titled Transactions on Journal of Electrical and Computer Engineering at Wiley.

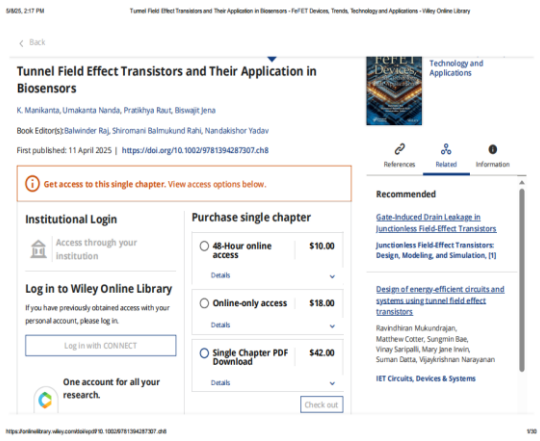
NPTEL/ MOOC COURSES

Dr. G. Amarnath Professor and Dean of IIC Academics has completed AICTE Evaluated 16-day Entrepreneurship Awareness Program on 11

April 2025 under the organization Turnip innovations.

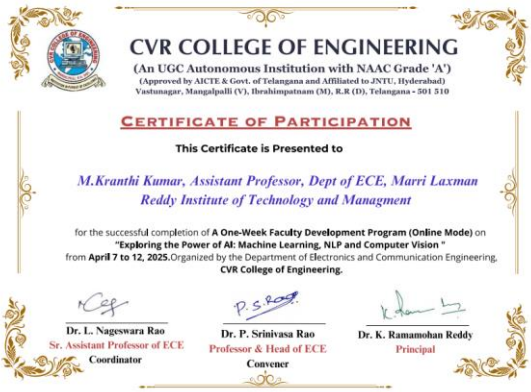
PAPER PUBLISHED IN JOURNALS

Dr. K. Manikanta Assistant Professor, of ECE department published a paper in the Scopus indexed journal on 11th April titled Tunnel Field Effect Transistors and Their Application in Biosensors, Chapter 8**.**



FDP ATTENDED

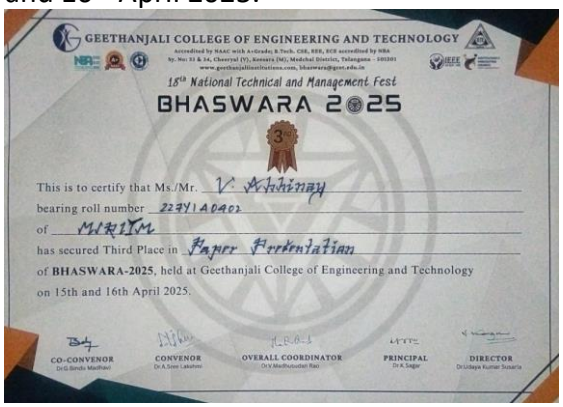
M. Kranthi Kumar Assistant Professor has attended a One week FDP on Exploring the power of AI, Machine Learning, ALP, and computer vision at CVR College of Engineering Hyderabad from 7th to 12th April 2025.



STUDENT CERTIFICATES

K. Vasavi bearing hall ticket number 227Y1A04i7 completed online course on Ethical Hacking on 17.04.2025 conducted by EDU SKILLS.

Abhinav Chary V bearing hall ticket number 227Y1A0402 participated in the paper presentation in Geethanjali College of engineering and Technology, Hyderabad on 15th and 16th April 2025.



AICTE ID: 1-44079196379

EVENTS ORGANIZED:

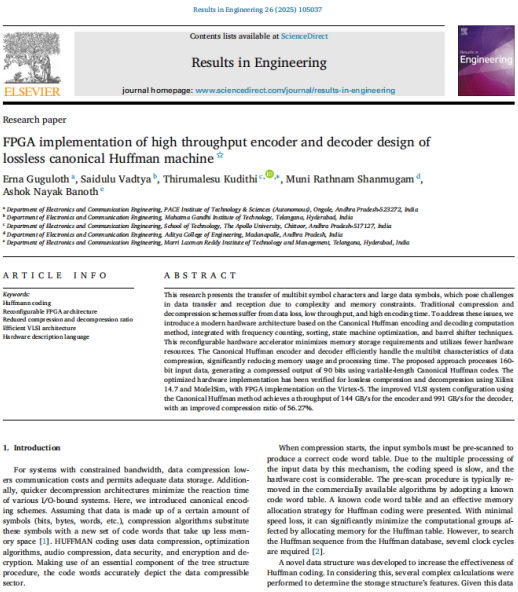
Dr. G. Amarnath, Professor of ECE department organized AICTE ATAL – Eduskills Faculty Development Program (FDP) on Zscaler Zero Trust Cloud Security from 12.05.2025-17.05.2025 at Marri Laxman Reddy Institute of Technology and Management with 50 participants..

NPTEL/ MOOC COURSES:

D. Malathi Rani, Assistant Professor has completed Data Analytics with Python course from Jan-April 2025 organized by the NPTEL.

PAPER PUBLISHED IN JOURNALS

Dr. Ashok Nayak Assistant Professor, of ECE department published an online paper in Q1 journal on 30th April titled FPGA implementation of high throughput encoder and decoder design of lossless canonical Huffman machine in Results in Engineering.


Results in Engineering 26 (2025) 105037

Contents lists available at ScienceDirect

Results in Engineering

journal homepage: www.sciencedirect.com/journal/results-in-engineering

Research paper

FPGA implementation of high throughput encoder and decoder design of lossless canonical Huffman machine

Erna Guguloth [a], Saidulu Vadtya [b], Thirumalesu Kudithi [c,*], Muni Rathnam Shanmugam [d], Ashok Nayak Banoth [e]

ARTICLE INFO

ABSTRACT

This research presents the transfer of multibit symbol characters and large data symbols, which pose challenges in data transfer and reception due to complexity and memory constraints. Traditional compression and decompression schemes suffer from data loss, low throughput, and high encoding time. To address these issues, we introduce a modern hardware architecture based on the Canonical Huffman encoding and decoding computation method, integrated with frequency counting, sorting, state machine optimization, and barrel shifter techniques. This reconfigurable hardware accelerator minimizes memory storage requirements and utilizes fewer hardware resources. The Canonical Huffman encoder and decoder efficiently handle the multibit characteristics of data compression, significantly reducing memory usage and processing time. The proposed approach processes 160-bit input data, generating a compressed output of 90 bits using variable-length Canonical Huffman codes. The optimized hardware implementation has been verified for lossless compression and decompression using Xilinx 14.7 and ModelSim, with FPGA implementation on the Virtex-5. The improved VLSI system configuration using the Canonical Huffman method achieves a throughput of 144 GB/s for the encoder and 991 GB/s for the decoder, with an improved compression ratio of 56.27%.

1. Introduction

FACULTY ATTENDED FDP

All the faculty from he department have done either online or offline Faculty development programs organized by different institutes, below figure shows few atteneded list of faculty appearing FDP's in the month of May.

Sl No	Name of the Faculty	Online/Offline	Title of the FDP	Name of the Institute Organized	Date (from to)	Duration
1	Dr. N. Srinivas	ATAL online FDP	ZScalar Zero Trust Cloud Security	Marri Laxman Reddy Institute of Technology and Management	12-05-2025 to 17-05-2025	One Week
2	Dr. R Prabhakar	ATAL online FDP	ZScalar Zero Trust Cloud Security	Marri Laxman Reddy Institute of Technology and Management	12-05-2025 to 17-05-2025	One Week
3	Dr. K. Manikanta	Oneline FDP	Semiconductor Industries and Artificial Intelligence in India	VIT- AP University	16-05-2025 to 21-05-2025	One Week
4	Mr. D Rupa Kumar	Oneline FDP	IoT and its applications in AWS	CMR Technical Campus	19-05-2025 to 24-05-	One Week
5	Mr. Ch Nagababu	ATAL online FDP	ZScalar Zero Trust Cloud Security	Marri Laxman Reddy Institute of Technology and Management	12-05-2025 to 17-05-2025	One Week
6	Mrs. Ch Krishnaveni	Oneline FDP	Semiconductor Industries and Artificial Intelligence in India	VIT- AP University	16-05-2025 to 21-05-2025	One Week
7	Mrs S K Hima Bindhu	Oneline FDP	Semiconductor Industries and Artificial Intelligence in India	VIT- AP University	16-05-2025 to 21-05-2025	One Week
8	Mrs S Sindhu Rekha	Oneline FDP	Semiconductor Industries and Artificial Intelligence in India	VIT- AP University	16-05-2025 to 21-05-2025	One Week
9	Mr. A. Anil Kumar	Oneline FDP	Semiconductor Industries and Artificial Intelligence in India	VIT- AP University	16-05-2025 to 21-05-2025	One Week
10	Mrs Nagajyothi	Oneline FDP	Semiconductor Industries and Artificial Intelligence in India	VIT- AP University	16-05-2025 to 21-05-2025	One Week
		ATAL online FDP	ZScalar Zero Trust Cloud Security	Marri Laxman Reddy Institute of Technology and Management	12-05-2025 to 17-05-2025	One Week
11	Mr R Raja Kishore	Oneline FDP	Semiconductor Industries and Artificial Intelligence in India	VIT- AP University	16-05-2025 to 21-05-2025	One Week
12	Mrs Pranali Surkar	Oneline FDP	Semiconductor Industries and Artificial Intelligence in India	VIT- AP University	16-05-2025 to 21-05-2025	One Week
13	Mrs N Pallavi	Oneline FDP	Semiconductor Industries and Artificial Intelligence in India	VIT- AP University	16-05-2025 to 21-05-2025	One Week
		ATAL online FDP	ZScalar Zero Trust Cloud Security	Marri Laxman Reddy Institute of Technology and Management	12-05-2025 to 17-05-2025	One Week
14	Mr S Manikanth	ATAL online FDP	ZScalar Zero Trust Cloud Security	Marri Laxman Reddy Institute of Technology and Management	12-05-2025 to 17-05-2025	One Week
15	Mrs P Sandhya	Oneline FDP	Semiconductor Industries and Artificial Intelligence in India	VIT- AP University	16-05-2025 to 21-05-2025	One Week
16	Mr R Kiran	Oneline FDP	Semiconductor Industries and Artificial Intelligence in India	VIT- AP University	16-05-2025 to 21-05-2025	One Week
17	Mrs B. Manjula	Oneline FDP	Semiconductor Industries and Artificial Intelligence in India	VIT- AP University	16-05-2025 to 21-05-2025	One Week

STUDENT INTERNSHIPS

L. Sijju bearing hall ticket number 227Y1A04H9, awarded first prize in a National level Hackathon conducted by IITM-K Center, Trivandrum at IITM-K Center, Trivandrum from 17th May to 20th May 2025.

Md. Adnan Shareef bearing hall ticket number 237Y5A0415, awarded third prize in a National level Hackathon conducted by IITM-K Center, Trivandrum at IITM-K Center, Trivandrum from 17th May to 20th May 2025.

STUDENT CERTIFICATIONS

B. Mahesh bearing hall ticket number 237Y1A04F1 completed two courses one in coursera and the other NPTEL in Introduction to Automotive Embedded Systems and cloud Computing.

Elite

NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India

This certificate is awarded to

BAKKI MAHESH

for successfully completing the course

Cloud Computing

with a consolidated score of 61 %

Online Assignments	22.19/25	Proctored Exam	38.33/75

Total number of candidates certified in this course: 30816

Jul-Oct 2024

(12 week course)

Prof. Haimanti Banerji

Coordinator, NPTEL

IIT Kharagpur

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL24CS118S1050202548 To verify the certificate No. of credits recommended: 3 or 4

INTERACTION WITH OUTSIDE WORLD– INVITED TALKS/ KEYNOTE ADDRESS:

It's a great pleasure to announce that Dr. R. Murali Prasad Sir Professor and Principal of Marri Laxman Reddy Institute of Technology and Management has received an invitation to present his speech for Board of Studies event from BOS member of JNTUH UCEJ, Kondagattu on 21st June 2025.

Date: 19 -06-2025

To
Dr. R.Murali Prasad, Prof. of ECE,
Principal,MLRITM Hyderabad.

Dear Sir,

Sub:-JNTUH UCEJ - Invitation for the second Board of Studies meeting - Request - Reg.

-o0o-

We wish to inform you that, the second Board of Studies meeting is scheduled to be held on 21-06-2025 (Saturday) at 11.00 AM in the ECE-Dept. JNTUH UCEJ Jagtial to discuss and finalize the 3rd year and 4th year First and Second semesters of B.Tech ECE, detailed syllabus and other academic matters.

Hence, we request you to make it convenient to attend the meeting on the above said date and time.

We look forward for your active participation in the Board of Studies meeting.

Thanking you,

With Warm regard
Dr.B.Prabhakar
HOD ECE-Dept.
JNTUH UCEJ,Kondagattu.

FACULTY ACHIEVEMENTS AND AWARDS

Proud to announce that Dr. N. Srinivas, Professor and HOD of ECE department received an Esteemed jury member award, on 24th *June* 2025 for an IETE AWARDS event at IETE New Delhi.

Gmail - REQUEST FOR RECOMMENDATIONS FOR THE 2025 IETE AWARDS

Gmail Srinivas Nallagonda <srinivas.nallagonda@gmail.com>

REQUEST FOR RECOMMENDATIONS FOR THE 2025 IETE AWARDS

1 message

Mrs Sandeep Kaur Mangat <boa1.iete@gmail.com> Tue, Jun 24, 2025 at 11:09 AM
To: Srinivas Nallagonda <srinivas.nallagonda@gmail.com>

Ref: IETE/J-216/AWDS/2025

Dr Srinivas Nallagonda
Professor and Head
Dept of ECE
Marri Laxman Reddy Institute of Technology and Management
Hyderabad-500043

SUB: REQUEST FOR RECOMMENDATIONS FOR THE 2025 IETE AWARDS

Respected Sir,

Greetings from IETE Secretariat!

1. I am writing to request your expert assistance in evaluating nominations for the IETE Yasodamma and Sarasavani Award-2025, as one of the panel's esteemed jury members.

2. The nomination(s) received for IETE Yasodamma and Sarasavani Award-2025,this year are 6.

3. The award has been instituted by Prof (Dr) V Gunasekhar Reddy, President of IETE to honour his mother (late) Smt Vannyakula Yasodamma, and his wife, Smt Saraswani. The award will be given to a person for significant achievements/ contributions in the fields of Wireless Sensor Networks & UAVs. The award consists of a citation, a medal and cash prize of Rs 5,000/-. The recipient will also be invited to deliver a lecture on the work that resulted in the award on a suitable occasion at the IETE Centre closest to the awardee's location.

4. The previous year award winner:
Dr Basavaraj S Mathapati (2023) and Dr Srinivas Nallagonda (2024)

5. I know that you must have a lot of responsibilities and obligations, and that you can only do this important task when you have time on your hands. However, I ask that you take some time to work on this important task for our institution and send your suggestions no later than July 12, 2025. Your recommendations will be presented at the IETE Governing Council meeting scheduled on 18 July, 2025.

6. Please send your assessment by email to boa1.iete@gmail.com using the attached proforma. We will be able to identify the most qualified nominee with your help.

Your unwavering support is much appreciated.

Thanking you,

Sincerely,

https://mail.google.com/mail/u/0/?ik=6199ad0a01&view=pt&search=all&permthid=thread-f:1835787697085803637&simpl=msg-f:1835787697085... 1/2

FDP ATTENDED

Mr. Ramagiri Kiran Assistant Professor has attended Faculty Development Program (FDP) on AI Mastery for Educator in IIT Patna 15th May to 06th June 2025.

Vishlesan i-HUB IIT Patna

CERTIFICATE

OF PARTICIPATION

This is to certify that

Mr. Ramagiri Kiran

Of

MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT

has completed the Faculty Development Program

AI Mastery for Educators

From 15th May, 2025 to 7th June, 2025

Dr. Sai Kiran
CEO, Vishlesan i-HUB IIT Patna

STUDENT INTERNSHIPS AND CERTIFICATES

B. Mahesh bearing hall ticket number 237Y1A05F1 completed online course from April to June 2025 conducted by EDU Skills.

B. Soumya Laxmi bearing hall ticket number 237Y1A0446 completed online course on 17th June 2025 conducted by Infosys Springboard.

Rapolu Vivek Kuma bearing hall ticket number 237Y1A0459 completed online course on the Modern C++ Challenger, Multi-Paradigm Programming with Modern C++ conducted by Infosys Springboard on 6th and 7th June 2025 and also completed online course AI- ML Virtual Internship conducted by EDU SKILLS in the month of June.

STUDENT AND FACULTY MEMBERSHIPS IN PROFESSIONAL BODIES:

Pranali Surkar, Assistant Professor of ECE Department got the professional IFERP membership with ID: PROF-7805192 in the month of June.


IFERP MEMBERSHIP
PROF-7805192
VALID THRU 05/26
PRANALI SURKAR
PROFESSIONAL MEMBER