NEWS LETTER

July – Dec 2024   Issue: 01

EDITORIAL COMMITTEE

Faculty Members:

Dr. R. Sarankumar, Professor & Head /EC
Dr. R. Selvakumar, AP/EC
Dr. G. Arun Francis, AP/EC
Mr. C. Mukuntharaj, AP/EC

Student Members:

717822L343 – Sabith Azeez S, III / EC-C
717822L333 – Poomeshwaran L, III / EC-C

DEPARTMENT OF
ELECTRONICS AND COMMUNICATION ENGINEERING

KARPAGAM
COLLEGE OF ENGINEERING
Rediscover | Refine | Redefine
(Autonomous)

INDEX PAGE

DEPARTMENT @ GLANCE

B.E. Electronics and Communication (EC) Engineering offered at Karpagam College of Engineering and established in the year 2000. The department has experienced and qualified faculty members, well equipped laboratory such as DSP lab, MEMS Lab, Communication and Microwave Engineering Lab, LIC / Digital Lab, VLSI Design Lab, Network sand Simulation and Electron Devices Lab with availability of latest and updated version of software package. The department has also promoted different center of excellence for MEMS Research and Development (CMRD),Centre for Signal Processing Research and Development (CSPRD),Centre for Embedded system Research and Development (CESRD), Centre for Image and Video Processing Research and Development (CIVRD),Centre for VLSI Design and Development (CVDD) and Centre for Research Communication and Wireless Network (CRCWN) for developing research activities in the field of Electronics and Communication Engineering.

VISION OF THE DEPARTMENT

❖ To provide innovative teaching and learning methodologies for excelling in a high-value career, higher education and research to the students in the field of Electronics and Communication Engineering to meet the needs of the industry and to be a part of the advancing technological revolution.

MISSION OF THE DEPARTMENT

❖ To create engineers of high quality on par with international standards by providing excellent infrastructure and well qualified faculty

❖ To enhance the collaborative and multidisciplinary activities to develop human and intellectual qualities

❖ To provide technical expertise to carry out research and development.

PROGRAMME EDUCATIONAL OBJECTIVES

Graduates of the B.E. (Electronics and Communication Engineering) Program will,

PEO 1: Have successful careers in Electronics and Communication Engineering and in allied professional fields.

PEO 2: Have the ability to work in multidisciplinary teams with the technical competency, collaboration, and leadership qualities.

PEO 3: Uphold professional ethics and exhibit continual knowledge advancement.

PROGRAMME SPECIFIC OUTCOMES

PSO 1: Good knowledge and hands-on competence to solve emerging real-world problems related to Electronic Devices and Circuits, Communication Systems, Digital Systems, and Electro-magnetics

PSO 2: Demonstrate proficiency in specialized software packages and computer programming useful for the analysis/design of electronic engineering systems and profession

INDUSTRY INSTITUTE PARTNERSHIP CELL

(Centre of Excellence / MoU's / Collaboration Activities / Partial Delivery)

- **Dr. Balambigai S,** Coordinator for MoU signing between Karpagam College of Engineering and M/s. Linkan Cleancell Innovation Pvt. Ltd. Karur and Organizing a Guest Lecture entitled "Text books to Startups" on September 30, 2024.
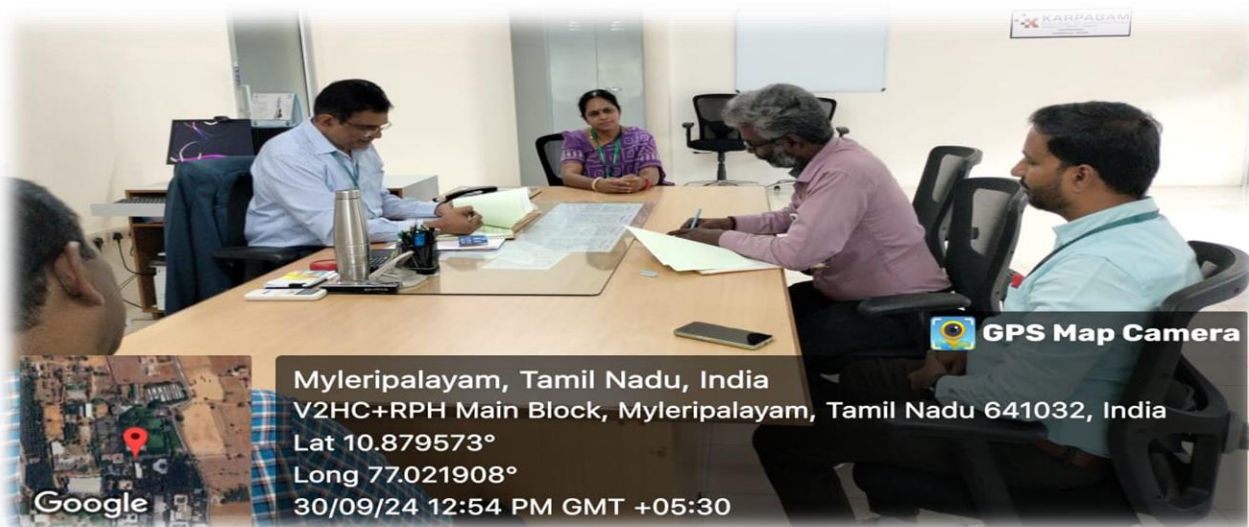

Fig.1: Dr. K. Senthil Kumar, Founder and CEO of Linkan Cleancell Innovation Pvt. Ltd signing MoU with our College for Internship, Placement, Upskilling Courses, Career Oriented Activities and Start Up Programmes.

Fig.2: Dr. K. Senthil Kumar presenting his Speech on Text books to Startups and interacting with our Students for their Career Development.

FACULTY CORNER

Faculty Awards / Achievements/ Patents

- **Dr. Karthigaikumar P,** Dean/Academics, received funding for a project titled "Design and Development of a System for Identification and Sorting of Different Plastic Classes using Spectroscopy" from the Department of Science and Technology, amounting to ₹146.933 lakhs, for the period 2020-2024.
- **Dr. G. Saravanakumar,** Professor/EC, received funding for a project titled "Camellia - IDrone An Intelligent Automatic System for the Pest Infestation Assessment and Spraying Intervention in Tea Plants of North East Region" from the Department of Science and Technology, amounting to ₹104.866 lakhs, for the period 2023-2026.
- **Dr. P. Karthigaikumar,** Dean/Academics, has patent "VOICE-ACTIVATED MOBILE DEVICE" on 1st October 2024 (Patent No: 432462-001).
- **Dr. S. Balambigai,** Professor/EC, has patent "INTERNET OF THINGS BASED FINANCIAL DATA PROCESSING AND DISPLAY DEVICE" on 22nd September 2024 (Patent No: 431270-001).
- **Dr. S. Deepa,** ASP/EC, has patent "CRICKET BOWLING MACHINE" on 1st August 2024 (Patent No: 417180-001).
- **Dr. G. Saravanakumar,** Professor/EC, has patent "INTELLIGENT PEST INFESTATION ASSESSMENT AND SPRAYING INTERVENTION SYSTEM EMPLOYED WITHIN A TEA PLANTATION" on 16th July 2024 (Patent No: 413724-001).
- **Dr. S. Balambigai,** Professor/EC, has patent "CLOUD BASED FULL BODY SCANNER" on 29th August 2024 (Patent No: 428592-001).
- **Dr. S. Deepa,** ASP/EC, has patent "SMART MACHINE FOR BOWLING" on 29th August 2024 (Patent No: 419912-001).
- **Dr. S. M. Swamynathan,** ASP Professor/EC, has patent "The Design Thinking Approach on Segregation of Biodegradable and Non-Biodegradable Wastage using IoT and Cloud" on 23rd August 2024.
- **Dr. Sarankumar R,** Professor & Head has awarded as best faculty in recognition of exemplary dedication to teaching and mentoring by Tech Forum Research Foundation on September 05, 2024.

- **Dr. R. Sarankumar,** Professor & Head has successfully completed NPTEL course on "Technical Communication for Engineers" during July to August 2024 with **Elite plus Gold** and secured **Topper 5% category.**

Fig.3: Dr. R. Sarankumar, Professor & Head secured Elite plus Gold and Topper with 5% in NPTEL.

- **Dr. S. Balambigai,** Professor has successfully completed NPTEL course on "Design Thinking – A Primer" during July to August 2024 with **Elite plus Silver** and secured **Topper 5% category.**

Fig.4: Dr. S. Balambigai, Professor secured Elite plus Silver and Topper with 5% in NPTEL.

- **Mr. Ram Prasath S,** Assistant Professor has successfully completed NPTEL course on "System Design Through Verilog" during July to September 2024 with **Elite plus Gold** and secured **Topper 5% category.**

Fig.5: Mr. Ram Prasath S, Assistant Professor secured Elite plus Gold and Topper with 5% in NPTEL.

Faculty Participation – Seminar / Webinar / Workshop / FDP / STTP

- **Dr. R. Sarankumar,** Professor & Head called as Chief Guest for student induction programme at Sri Ramakrishna Institute of Technology on September 10,2024.
- **Dr. G. Saravanakumar,** Professor/EC acted as Resource person for one day National level Workshop on, "Deep Learning Models for Image Processing" on October 09, 2024.
- **Mr. Mukuntharaj C,** Assistant Professor/EC called as Resource person for one day Workshop on, "One Day Hands on Training on Tinker CAD" on August 21, 2024.

- **Dr. S. Deepa,** ASP/EC, Translated NPTEL course, "Analog Electronic Circuits" offered by IIT Kharagpur during July 2024.

Fig.6: Certificate of Appreciation awarded to Dr. S. Deepa, ASP/EC by NPTEL for translating the course 'Analog Electronic Circuits, offered by IIT Kharagpur.
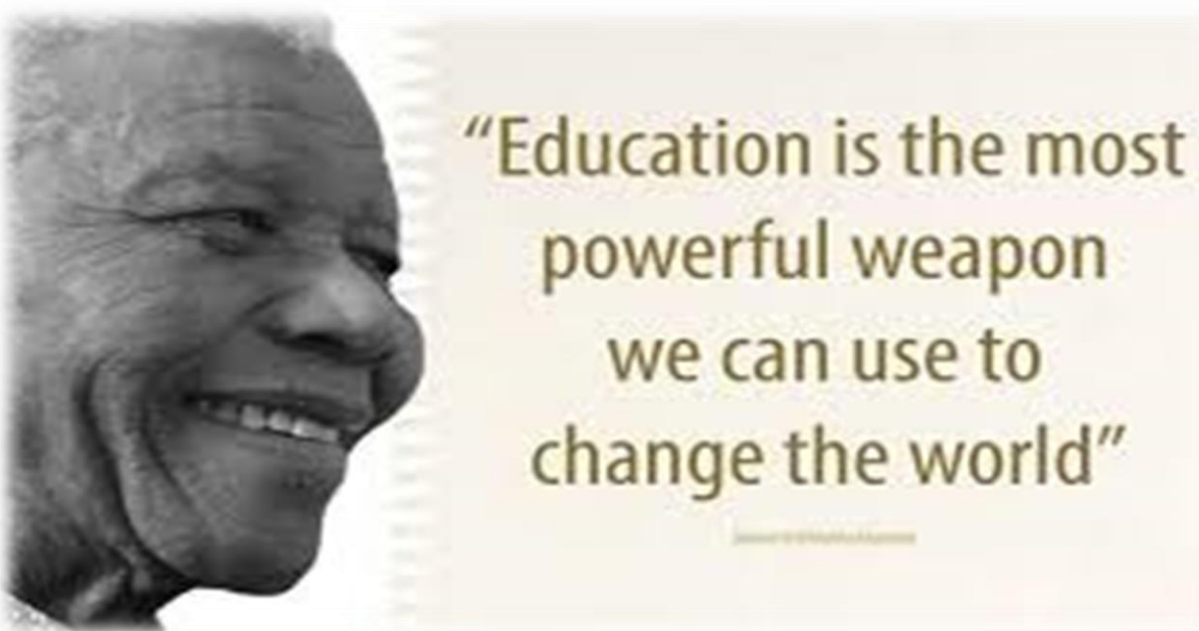
Faculty Publications – Books / Conferences / Journals

- **Dr. R. Sarankumar,** Professor & Head, published "GSE and GEW Techniques to improve ON (ION) current and Ambipolar conduction of Tunnel FET (TFET) device" in International Conference on Social and Sustainable Innovation in Technology and Engineering, Tadepalligudem, India, 2024, doi: 10.1109/SASIITE58663.2024.00015.

- **Dr. C. Priya,** Associate Professor, published "Smart Helmet Proximity Alerts for Enhanced Safety in underground Mines" in Proceedings of 2024 International Conference on Science, Technology, Engineering and Management, Coimbatore, India, 2024, doi: 10.1109/ICSTEM61137.2024.10561097.

- **Dr. C. Priya,** Associate Professor, published "Women's Defence System with Electric Shock, Image capturing and fingerprint timer" in Proceedings of 2024 International Conference on Science, Technology, Engineering and Management, Coimbatore, India, 2024, doi: 10.1109/ICSTEM61137.2024.10560665.

- **Ms. L. Saranya,** Assistant Professor, published "Design of optimized compressor-based multiplier with error correcting module" in International conference on Science Technology Engineering and Management, Technology, Engineering and Management, Coimbatore, India, 2024, doi: 10.1109/ICSTEM61137.2024.10561188.

- **Dr. S. Balambigai,** Professor, published "Predicting Solar and Wind Power Production with Weather Map Data Approach" in International Conference on Signal Processing, Computation, Power and Telecommunication, Engineering and Management, Karaikal, India, 2024, doi: 10.1109/IConSCEPT61884.2024.10627791.

- **Ms. S. Malini,** Assistant Professor, published "Integrating LoRa for Enhanced Hazard Detection and Mitigation in Industrial Environments" in Parul International Conference on Engineering and Technology,Vadodara,India,2024,doi: 10.1109/PICET60765.2024.10716094.

- **Ms. S. Malini,** Assistant Professor, published "Smart Wireless Resonant Charging of Electric Vehicles (EV)" in 10th International Conference on Advanced Computing and Communication System, Coimbatore,India, 2024, doi: 10.1109/ICACCS60874.2024.10717057.

- **Dr. S. Balambigai,** Professor, published "Exploration of Key components in wireless sensor networks utilizing Artificial Intelligence and virtualized security" in the 5th International Electronic Conference on Applied Sciences session Computing and Artificial Intelligence, Engineering and Management, 2024, website: https://sciforum.net/paper/view/20801

- **Dr. S. Deepa**, Associative Professor, published "Obstacle Avoidance Vehicle Using LiDAR" in 10th International Conference on Advanced Computing and Communication Systems, Coimbatore, India, 2024, doi: 10.1109/ICACCS60874.2024.10717215.

- **Ms. L. Saranya,** Assistant Professor, published "Power Optimization in Wireless Sensor Network using VLSI Technique on FPGA Platform" in Neural Processing Letters, Vol. 56, 2024, pg. 125, doi:10.1007/s11063-024-11495-2.

- **Dr. S. Sobana,** Associate Professor, published "Apex Feed Microstrip Printed Hybrid Dielectric Resonator Antenna for Wireless Application" in Journal Tehnicki Vjesnik/Technical Gazette, Vol. 31, 2024, pg. 864, doi:10.17559/TV-20230908000924.

- **Dr. C. Priya,** Associate Professor, published "Integration of Binary Subcarrier with Hilbert Matrix (BSS - HBM) using 39 GHz MIMO Antenna in 5G Application" in Journal of Nano and Electronic Physics, Vol. 16, 2024, pg. 3007, doi: 10.21272/jnep.16(3).03007.

- **Dr. S. Sobana,** Associate Professor, published "Exploring the potential of 5G uplink communication: Synergistic Integration of Joint Power Control, User Grouping, and Multi-Learning Grey Wolf Optimizer" in Scientific Reports, Vol. 14, 2024, pg. 864, doi:10.1038/s41598-024-71751-2 (IF:3.8).

- **Ms. S. Malini,** Assistant Professor and **Dr. P. Karthigaikumar,** Professor and Dean/Academic, published "A Weighted AIMD Congestion Control Algorithm for Device -to - Device Communication in 5G Network" in IETE Journal of Research, 2024, pg.1, doi:10.1080/03772063.2024.2400257.

- **Dr. Aadhavan R,** Professor, published "Fabrication of SnSe Nanostructure Visible Photodetectors" in Inorganic Chemistry Communications, Vol. 170, 2024, pg. 113276, doi:10.1016/j.inoche.2024.113276.

- **Mr. Mukuntharaj C,** Assistant Professor and **Dr. Selvakumar R,** Assistant Professor, published "Low power Controlled Ring Oscillator with Complementary Drain Capacitance (CRO-CDC) for UWB Applications" in National Academy Science Letters, 2024, doi:10.1007/s40009-024-01552-8.

- **Ms. T. Dharanika,** Assistant Professor, published "Design of Fostered Power Terahertz VLSI Testing Using Deep Neural Network and Embrace User Intent Optimization" in Journal of Nanoelectronics and Optoelectronics, Vol. 19, 2024, pg. 724, doi:10.1166/jno.2024.3619.

- **Dr. S Deepa,** Associate Professor, published "Prediction and classification of solar photovoltaic power generation using extreme gradient boosting regression model" in International Journal of Low-Carbon Technologies, Vol. 19, 2024, pg. 2024, doi: 10.1093/ijlct/ctae197.

STUDENTS CORNER

Students Awards / Achievements/ Patents

- **ANISH P, NAVIN Y, NIYAMATH P, SIRAN P** participated in Poster and Project Presentation titled Innovating with AI and Emerging Technologies in Smart Cities with their project and secured **1st place** on September 11, 2024 to September 12, 2024 at Karunya Deemed University, Coimbatore.
- **NANDHITHA L** has participated in Poster Design: PEnvision – 2024 and secured **1st place** on September 30, 2024 at Rathinam College of Arts and Science, Coimbatore.
- **GOKUL S** has participated in Cysentia-2K24 Codebug and secured **3rd place** on August 04, 2024 at Jawaharlal Nehru Technological University, Kakinada.
- **NAVIN Y,** III EC C has successfully completed NPTEL course on "Introduction to Internet of Things" during Jul-Dec 2024 with **Elite plus Gold** and secured **Topper 2% category.**

Fig.7: Navin Y secured Elite plus Gold and Topper with 2% in NPTEL.

- **SUDALI K,** III EC A has successfully completed NPTEL course on "Introduction to Internet of Things" during Jul-Dec 2024 with **Elite plus Gold** and secured **Topper 2% category.**

Fig.8: Sudali K secured Elite plus Gold and Topper with 2% in NPTEL.

- **ARUN V,** IV EC C has successfully completed NPTEL course on "System Design Through Verilog" during Jul-Dec 2024 with **Elite plus Gold** and secured **Topper 5% category.**

Fig.9: Arun V secured Elite plus Gold and Topper with 5% in NPTEL.

Students Publications – Conferences / Journals

- **ARUN V, KISHORE C, LALIDHESH J, PAVAN KUMAR S**, "Aqua Guard RC Canoe", International Conference on AI – Driven innovation in Healthcare, Telecommunications, Energy & Industrial Sectors – AIHTEI 2K24, Erode Sengunthar Engineering College, Erode, 08.08.2024 & 09.08.2024.

- **DINESHKUMAR B A, GOKUL S, NANDHIKA L, NANDHITHA L,** "Drone based Magnetic Sensing and Metalic Anamoly Detection System", International Conference on AI – Driven innovation in Healthcare, Telecommunications, Energy & Industrial Sectors – AIHTEI 2K24, Erode Sengunthar Engineering College, Erode, 08.08.2024 & 09.08.2024.

- **ELAMATHI R, KARKUZHALI S, KEERTHANA P,** "Smart Waste Management using IoT", National Level Conference on Green Mechatronics System – (NCGREEMS'24), Hindusthan College of Engineering and Technology, Coimbatore, 24.10.2024 to 25.10.2024.

- **ABDUL MAJITH M, DHIVAKAR K K, THUSYANTH J, DHANISKAR T,** "IoT Based Energy Efficient Smart Street Lighting Technique with Air Quality Monitoring", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **SRINATH S, LOGESWARAN M S, KARHTIKEYAN S, JOHN JAYAPANDIYAN J,** "Intrusion Detection using ML", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **HARRISH S V, KISHORE R, ANANDHAN S, AJAY V,** "Animal Detection based Smart Farming in Repelent Using AI and IoT", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **MIRTHULA R, SATHYA JAYA SREE R, SELVADHARSHINI S, SUJINI C,** "Lossless ECG Compression Algorithm using Adaptive Trending Prediction", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **ARTHI N R, SRUTHIKA S V, SRUTI P, VAISHNAVI V,** "Cognitive State Visualization Through Comprehensive EEG-Based Emotion Detection", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **BOWNIKA T, HARSHAVARTHINI. S, NANDHINI N,** "Fault Detection and Diagnosis Induction Motors", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **DHARANYA P, GOPIKA B, PRIYADHARSHINI A, PRIYADHARSHINI M,** "Developing of Convolutional Neural Network Classification and Model of Lung Cancer Diagnosis Using CT Images", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **DHARANIDHAR R, GOWTHAM K, SACHIN KUMAR J, SANTHOSH KUMAR G,** "Hand Gestures using for Impaired People in Open CV", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **RAMIYA SRI, RITHANYA M, VAASANTHIKA,** "Driver Drowsiness Detection using Convolution Neural Network (CNN)", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **AKILESH S, GIRITHARAN, KISHORE S, VIGNESH M,** "Real Time Hill Station Landslide Monitoring and User Notification system Using Zigbee Based Embedded System", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **SURENDHAR S, VISHNU P, JAYASURIYA D, KARTHICKRAJA R,** "Breaking Barriers in Heart Health: Predictive Modeling of Cardiovascular Disease with AI", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **RANJITH KUMAR P, SIMBU M, HARIPRAKASH P, RAJAKUMAR S,** "Enhancing Brain Tumor Diagnosis: A Hybrid Machine Learning Model with PCA and SHAP for Interpretability", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **PRIYANANDHAN M S, THANIESH T, SARATHY N, RAAGAVA SUGANESH,** "Pharmaceutical Vending Machine for Dispensing Essential Drugs using IoT", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **DHARSHINI P, KRISHNARAJ R, JAGATH M, MAHALAKSHMI S,** "Intelligent Traffic Management System Using Machine Learning", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **AADHITHYAVASAN V, ABISHEK P, NAVEEN KUMAR, SUBHASRI,** "Design of 28 GHz Microstrip Patch Antenna for Wireless Applications", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **JANANI N, PALANIAPPAN N, ROOPIKA SREE S, SANJAY R,** "Tomato Leaf Diseases Detection using Deep Learning", International Conference on Engieering Solutions and

Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **SATHISH SHARMA J, SUBHAKAR S, THAKSHITHA G, VIGNESH K,** "Two-way Sign Language Communication", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **MANISHA P, SATHYA M, SHAILINI A R K, UDHAYA V,** "Women Safety night Patrollng IoT Robot", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **GOBINATH M, KARTHIK S, RANJITHA S, VISHNUVARDHAN S,** "Design of a Low Power Shift Register using D Flipflops", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **AKASH N D, ROHITHA S, AGATHESH P R, HARIHARASUDHAN S,** "Design of Microstrip Patch Antennas with Enhanced Radiation Efficiency for 5G IoT Devices and Satellite Environments", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **GOKULAKRISHNA C K, KARTHIKEYAN C, VENKATESH S, VISHWA S,** "Bio Degradable and Non-biodegradable Home Waste Segregation and recycling", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **SUDHEESH V G, SIRANJEEVI P, THAMARAISELVAN J, THIRUMAL P,** "Decoding Human Emotions from EEG Signal with Machine Learning for Enhanced Brain Computer Interface", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **AKSHITHA A, DHANUSH KUMAR S, MARIA JENO AUGUSTTA X, MOWMITHA PV,** "Underground Cable Fault Distance Locator using IoT", National Level Conference on Green Mechatronics System – (NCGREEMS'24), Hindusthan College of Engineering and Technology, Coimbatore, 24.10.2024 to 25.10.2024.

- **BHUVANESHVARI R, MOHANRAJ V, PRATHISH J, PRAWIN RAJ G,** "Detection of Various Lung Diseases using CNN Architecture", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **BRIGHTLY, CHANDRU, SANJEEVAN C, THARUN R, TANUSREE,** "Speaking System for Dumb People using IoT", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **DIVYA M, NISHA B, RAJESHWARI S,** "Smart Telemedicine Kisok for the Application of Remote Patient Monitoring using Arduino UNO", International Conference on Engieering

Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **GUNABHARATH K, NANDAKUMAR J, SRI NITHI V, SRIKANTH K S,** "Energy Efficient Accuracy Configurable Dabba Multiplier based on Configurable Adder and Voltage Overscaling", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **JEYASURYAPRABAHARAN A, SANTHOSH KUMAR A S, SENTHILKUMAR N, SUBHIKSHA POORANI P,** "Vehicle Black Box System", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **KAMALIKHAA V, MANI SANTHIYA C, SARASWATHI R, SINDHU S,** "Developing Audio Narratives from Visual Images for the Visually Impaired", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

- **KEERTHERAJ VS, MAHARAJAN M, RATHISH S, VINITH KUMAR V,** "Braille Text Analyser and Converter", International Conference on Engieering Solutions and Technologies (ICEST'24), Erode Sengunthar Engineering College, Erode, 14.11.2024 to 15.11.2024.

Students Participation – NPTEL / AICTE / MOOC's

Platform	Course Title	Category				Total Certificates
		Elite plus Gold	Elite plus Silver	Elite	Successfully Completed	
NPTEL	System Design Through Verilog	1	2	21	46	70
	Digital VLSI Testing	-	-	2	19	21
	Introduction to Internet of Things	2	18	37	17	74
	Introduction to Industry 4.0 and Industrial Internet of Things.	-	1	28	21	50
	VLSI Design Flow: RTL to GDS.	-	-	1	-	1
IIT Bombay-	Advanced CPP	-	-	-	3	3

Spoken Tutorial	eSim	-	-	-	3	3
Udemy	Learn SQL in 3 hours: A tutorial for fast learners	-	-	-	1	1
Coursera	Programming with Java Script	-	-	-	1	1
	Foundations: Data, Data Everywhere	-	-	-	1	1
Skill up	Introduction to Generative AI Studio	-	-	-	1	1
Great Learning Academy	Front End Development - HTML	-	-	-	1	1
	Front End Development - CSS	-	-	-	1	1
	Introduction to Java Script	-	-	-	1	1
MongoDB	Introduction to MongoDB for Students	-	-	-	4	4
	MongoDB Aggregation	-	-	-	1	1
	Getting Started with MongoDB Atlas	-	-	-	2	2
	MongoDB Atlas Search	-	-	-	1	1
	MongoDB and the Document Model	-	-	-	1	1
	MongoDB Indexes	-	-	-	1	1
	Connecting to a MongoDB Database	-	-	-	1	1
	MongoDB Crud Operations: Insert and Find Documents	-	-	-	1	1
	MongoDB Crud Operations: Insert and Delete Documents	-	-	-	1	1

		-	-	-	1	1
	MongoDB Crud Operations: Modifying Query Results	-	-	-	1	1
	MongoDB Data Modeling Intro	-	-	-	1	1
	MongoDB Transactions	-	-	-	1	1
Hacker Rank	Java Basics	-	-	-	1	1
	Java Script: Basics	-	-	-	1	1
	Java Script: Intermediate	-	-	-	1	1
Code Chef	Problem Solving Basic	-	-	-	2	2

Students Participation – Seminar / Workshop / Symposium

- **DIVAKAR K K, GOWTHAM K, KAPILESH KUMAR S, SANGEETH S, YADHUANAND P, DINESHKUMAR B A, GOKUL S, GOKULAKRISHNA C K, GUNABHARATH K, KEERTHERAJ V S, LALIDHESH J, PAVANKUMAR S, SUDARSUN S** participated in the National event titled CeNSE Summer School on Semiconductor Technology and Microfabrication in Indian Institute of Science, Bengaluru on June 03, 2024 to June 14, 2024.

- **BOOBASHKUMAR S** has participated in the National event titled International Observe the Moon Night-2024 in National Aeronautics and Space Adminsitration (NASA) on September 14, 2024.

- **BOOBASHKUMAR S** has participated in the National event titled Virtual Tour Experiences and Learning more about NASA in National Aeronautics and Space Adminsitration (NASA).

- **SURENDRAN T** has participated in the event titled Invente'24 – Cyber Sceurity Workshop in SSN College of Engineering, Chennai on September 27, 2024 to September 28, 2024.

- **AMRENA** has participated in the event titled Anokha – 2024 – Ideathon'24 in Amrita Vishwa Vidyapeetham, Coimbatore on October 17, 2024 to October 19, 2024.

- **AMRENA** has participated in the event titled Anokha – 2024 – Generative AI – A Deep Dive in Amrita Vishwa Vidyapeetham, Coimbatore on October 17, 2024 to October 19, 2024.

- **SANTHIYA T** has participated in the event titled Anokha – 2024 – Generative AI – A Deep Dive in Amrita Vishwa Vidyapeetham, Coimbatore on October 17, 2024 to October 19, 2024.

- **SANTHIYA T** has participated in the event titled Srishti 2K24 – Watts Next? Exploring EV Innovations Workshop in PSG College of Technology, Coimbatore on October 05, 2024 to October 06, 2024.

- **SANTHIYA T** has participated in the event titled Srishti 2K24 – Mastering Network Analysis in PSG College of Technology, Coimbatore on October 05, 2024 to October 06, 2024.

- **NAVEENKUMAR K, AHMADUSAIDH M, ANUCHAND S, NIYAMATH P, SARANDEEP BALAJI B,** participated in the event titled IEEE Region 10 Young Professional Upskill 2024 in IEEE Madras Young Professionals & Sri Krishna College of Engineering and Technology, Coimbatore on September 28, 2024.

- **SIRAN P, NAVIN Y, ANISH P, NIYAMATH P, SURYA PRASATH S, SRI NANDHAN S,** participated in the event titled Project Presentation 2.0-TechcCon in Kumaraguru College of Technology, Coimbatore on September 11, 2024.

- **NAVIN Y, NIYAMATH P, SURYA PRASATH S, SRI NANDHAN S,** participated in the event titled Project Expo 2024 in Sri Ramakrishna Instititute of Technology, Coimbatore on October 26, 2024.

- **SIRAN P, NAVIN Y, ANISH P, NIYAMATH P,** participated in the event titled Galaxy'24 – PHASE II - Project War in Government College of Engineering, Erode on October 24, 2024 to October 25, 2024.

- **NIYAMATH P, SARANDEEP BALAJI B,** participated in the event titled VOLT – Volunteer Leadership Training Program in IEEE Madras Section, Chennai on October 19, 2024.

- **MUHIL M V, KABILAN M, ANUCHAND S, LATHIKA S, KAAVIYA T, DEEPIKA D,** participated in the event titled Mastering Visual Design & UI/UX Essentials in Sathyabama Institutue of Technology, Chennai on July 8, 2024 to July 12, 2024.

- **SIRAN P, NAVIN Y, ANISH P, NIYAMATH P,** participated in the event titled KRISHNECS 2K24 – Project Expo in Sri Krishna College of Engineering and Technology, Coimbatore on October 09, 2024.

- **NIYAMATH P** has participated in the event titled IEEE Day Poster Palette in Sri Krishna College of Engineering and Technology, Coimbatore on October 10, 2024.

- **NAVIN Y** has participated in the event titled ASME TN-NOVATE in Sri Ramakrishna Institute of Technology, Coimbatore on November 08, 2024.

- **NAVIN Y** has participated in the event titled ASME TN-NOVATE in Sri Ramakrishna Institute of Technology, Coimbatore on November 08, 2024.

- **NANDHITHA L** has participated in the event titled Diamond District Trainers Workshop in Rotaract Club of Saibaba Colony, Coimbatore on October 26, 2024 to October 27, 2024.

- **NANDHITHA L** has participated in the event titled Editorial Workshop in Adobe Illustrator and CapCut at "JAADE - District Editorial Workshop and Seminar" in Coimbatore Institute of Technology, Coimbatore on August 10, 2024 to August 11, 2024.
- **JANANI L** has participated in SPECTRA'24 a National level Technical Syposium event titled Enchanted Paper in Kongu Engineering College, Erode on October 23, 2024.
- **THEJESHVINI** has participated in SPECTRA'24 a National level Technical Syposium event titled Enchanted Paper in Kongu Engineering College, Erode on October 23, 2024.
- **SWETHA P** has participated in SPECTRA'24 a National level Technical Syposium event titled Enchanted Paper in Kongu Engineering College, Erode on October 23, 2024.
- **DHEENU** has participated in SPECTRA'24 a National level Technical Syposium event titled Enchanted Paper in Kongu Engineering College, Erode on October 23, 2024.

Teacher leadership is essential for principals because it not only supports instructional improvement but also strengthens the school's overall culture and effectiveness.

Dr. Ryan Daniel

What Makes a Great Principal: The Five Pillars of Effective School Leadership

EVENTS ORGANIZED

- **Mr. C. Mukuntharaj,** Assistant Professor and **Mr. S. Ramprasath,** Assistant Professor, have organized the event "Unlocking ECE Core Potential: Career Insights and Trends" associated with IE (I) on July 26, 2024 to facilitate the students and faculty members. Recourse person **Er. Mohammed Arif**, Project Manager, LTTS, Coimbatore delivered the content to audience in the event.

Fig.10: Unlocking ECE Core Potential: Career Insights and Trends

- **Mr. N.M. Jayadevan,** Assistant Professor, **Dr. R. Selvakumar,** Assistant Professor and **Mr. C. Mukuntharaj,** Assistant Professor, have organized the event "Mini Project Expo - 2024" associated with IEEE and IE (I) on August 08, 2024 to facilitate the students and faculty members.

Fig.11: "Mini Project Expo – 2024" in association with IEEE and IE(I).

- **Dr. C. Priya** Associate Professor and **Dr. G. Arun Francis** Assistant Professor, have organized the event "Scope for Engineers in Government Sectors" associated with IEEE and IE (I) on August 10, 2024 to facilitate the students and faculty members. Recourse person **Mr.P.Karthik** (Class 2020) Assistant Branch Manager, Tamilnadu Grama Bank, Salem and **Dr. R. Sarankumar**, HoD/EC delivered the content to audience in the event.

Fig.12: Scope for Engineers in Government Sectors

- **Dr. R. Aadhavan** Professor and **Dr. A. Sureshbabu** Associate Professor, have organized the event "Project Ideas into 3P" associated with IEEE and IE (I) on August 31, 2024 to facilitate the students and faculty members. Recourse person **Dr. S.M. Swamynathan** Associate Professor, delivered the content to audience in the event.
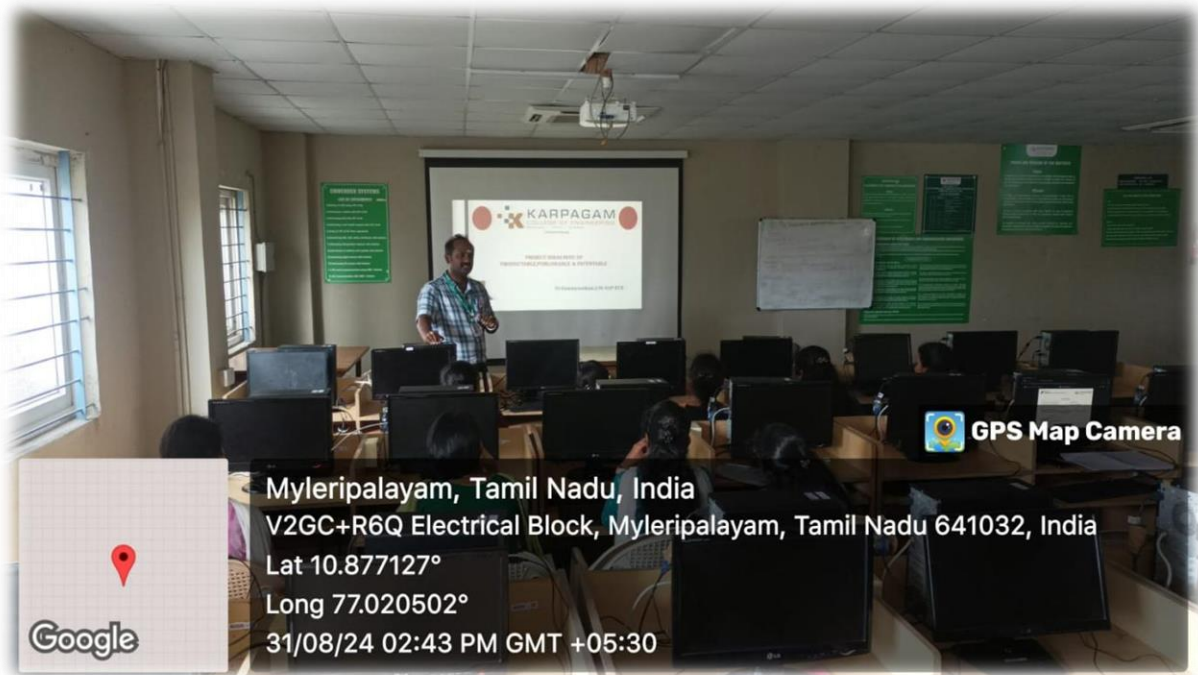

Fig.13: Project Ideas into 3P

- **Dr. S. Sobana,** Associate Professor and **Mrs. T. Dharanika,** Assistant Professor, have organized the event "The Entrepreneur's Guide: Launching Your Dream Startup" associated with IEEE and IE (I) on September 03, 2024 to facilitate the students and faculty members. Recourse person **Mr.K.R.N. Manoj,** Director, Puma Technovation Pvt Ltd, Coimbatore, delivered the content to audience in the event.

Fig.14: Entrepreneur's Guide: Launching Your Dream Startup

- **Dr. S. M. Swamynathan** Associate Professor has organized the event "Embedded System in Automotive" associated with IEEE and IE (I) on September 14, 2024 to facilitate the students and faculty members. Recourse person **Mr.G.Alangara Kannan**, Test Manager, Robert Bosch, Coimbatore, delivered the content to audience in the event.
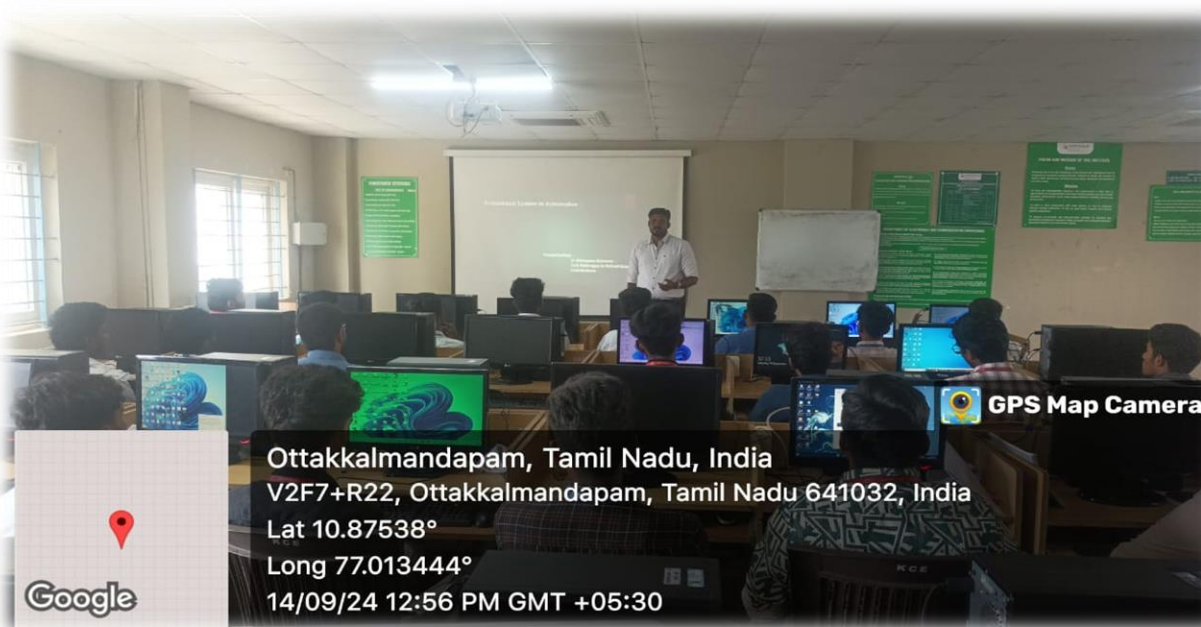

Fig.15: Embedded System in Automotive

- **Dr. G. Arun Francis** Assistant Professor, has organized the event "Career Pathways for ECE Engineers. An Exclusive Alumni Insight" associated with IEEE and IE (I) on September 24, 2024 to facilitate the students and faculty members.

- **Ms. S. Tharanipriya** Assistant Professor and **Ms. V. Lavanya** Assistant Professor, have organized the event "Next Gen Simulation: Mastering Electromagnetic Design with CST" associated with IEEE and IE (I) on September 27, 2024 to facilitate the students and faculty members.

Fig.16: Next Gen Simulation: Mastering Electromagnetic Design with CST

- **Dr. S. Deepa,** Associate Professor, have organized the event "Real Time Implementation of GEN AI" associated with IEEE on October 01, 2024 to facilitate the students and faculty members. Recourse person **Mr.Sabarinathan Muthu,** Founder & CEO, Gateway Solutions, Coimbatore and **Dr. R. Sarankumar**, Head of the Department delivered the content to audience in the event.
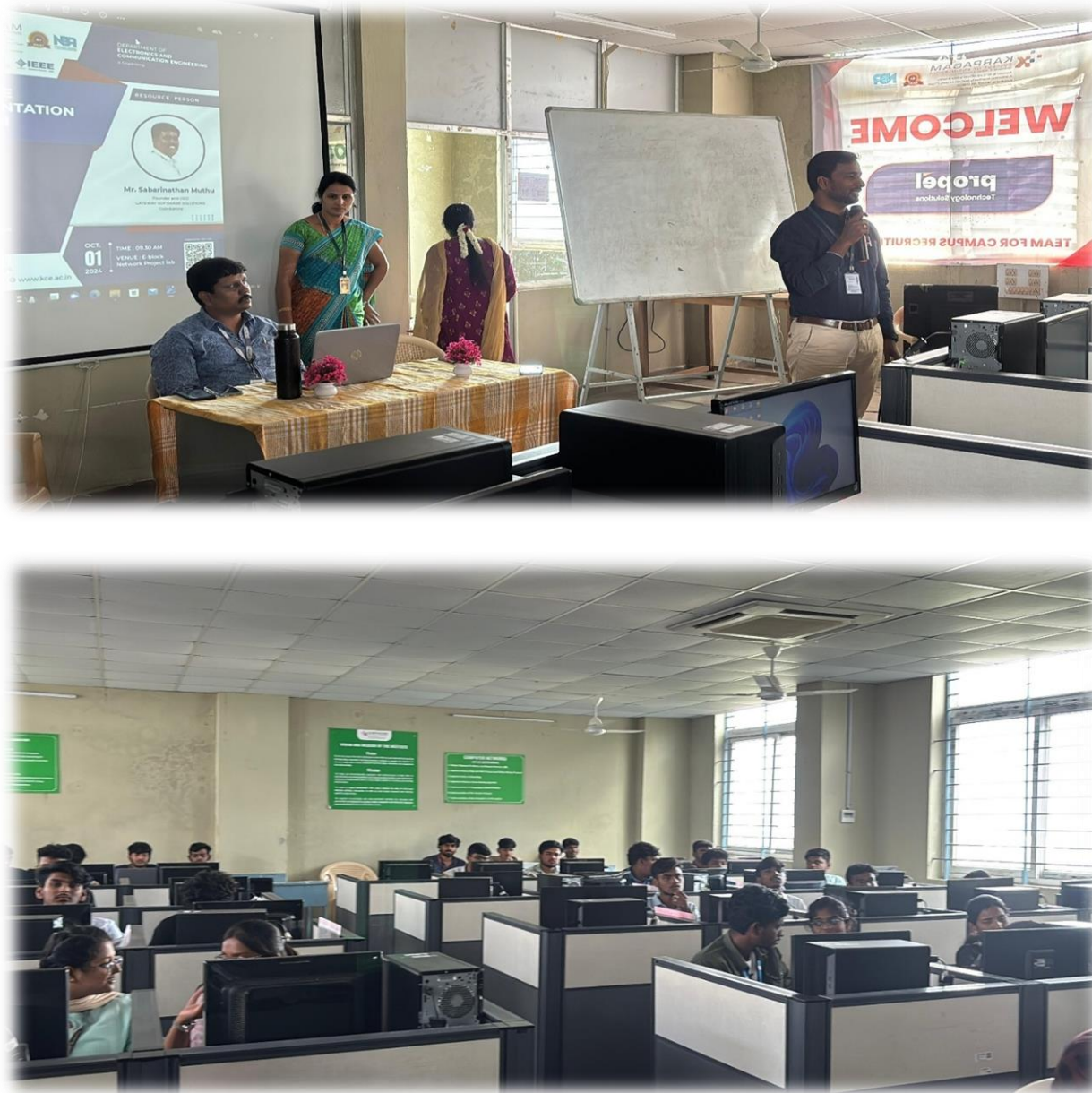

Fig.17: Real Time Implementation of GEN AI" associated with IEEE

- **Dr. A. Suresh Babu** Associate Professor, has organized the event "IEEE Day: 2024 – Navigating Career Paths with IEEE Membership" associated with IEEE on October 03, 2024 to facilitate the students and faculty members. Recourse person **Mr. Sarath S**, Vice Chair Technical and Membership Activities, IEEE Education Society YP Adhoc and **Dr. R. Sarankumar**, Head of the Department" delivered the content to audience in the event.
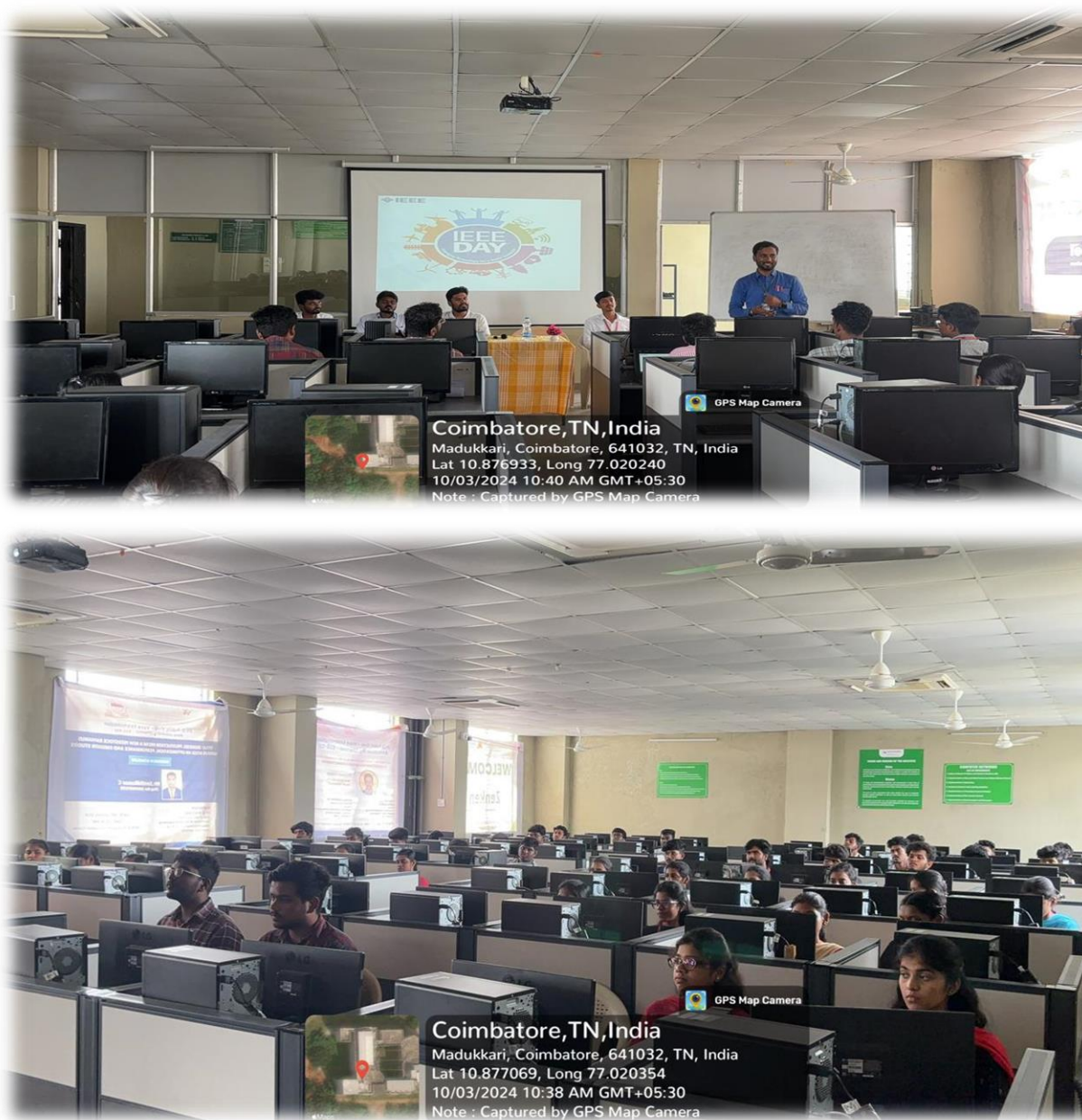

Fig.18: IEEE Day: 2024 – Navigating Career Paths with IEEE Membership

- **Dr. G. Arun Francis** Assistant Professor and **Ms. T. Happila** Assistant Professor, have organized the event "Deep Learning Models for Image Processing" associated with IEEE on October 09, 2024 to facilitate the students and faculty members.


Fig.19: Deep Learning Models for Image Processing

- **Dr. Balambigai S,** Professor, has organised a guest lecture titled, "Textbooks to Startups" associated with IEEE on September 30, 2024 to facilitate the students and faculty members.
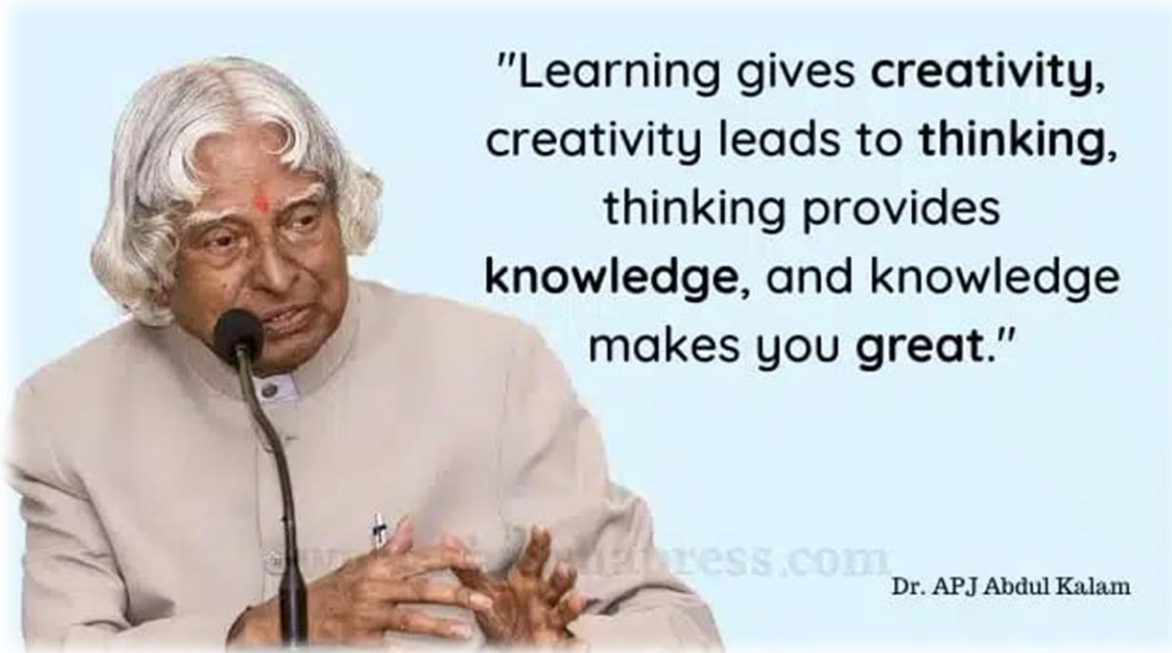

Fig.20: Dr. K. Senthil Kumar presenting his Speech on Text books to Startups and interacting with our Students for their Career Development.
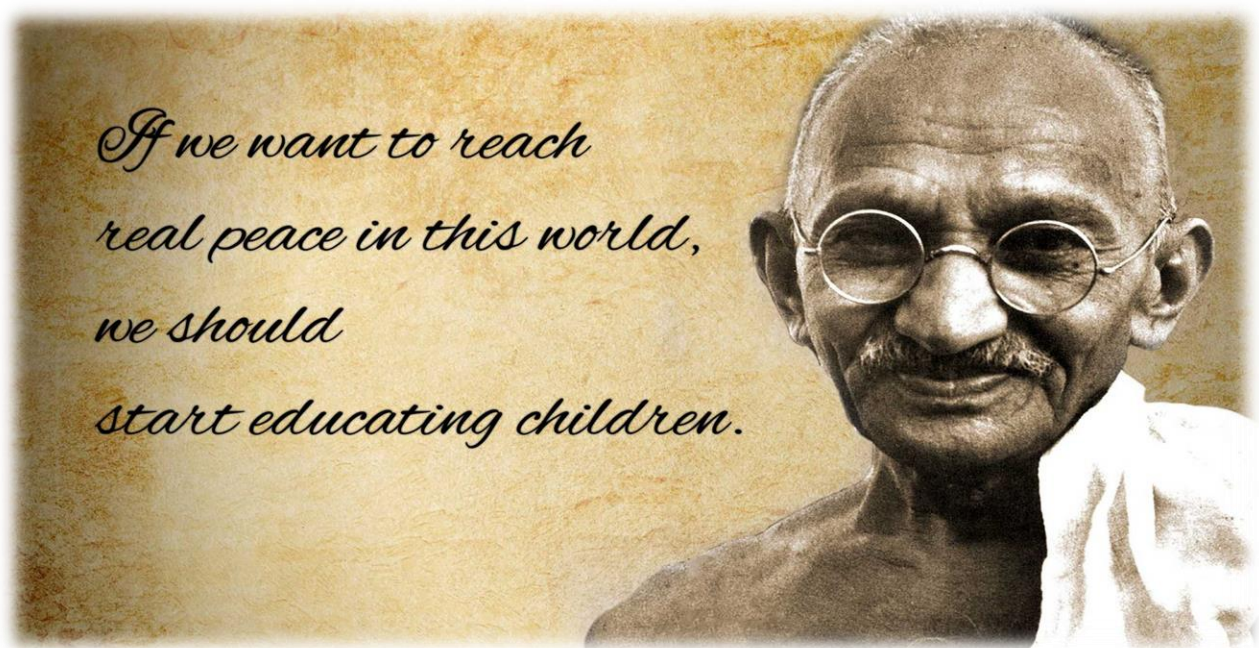
Extra-Curricular Activities – Sports / Cultural

- **Ms.NANDHITHA L** has participated in the event "Freedom Run for Cyber Crime Against Women Marathon" conducted on 1st September 2024.
- **Ms.NANDHITHA L** has participated in the event "Throw Ball" conducted on 10th September 2024 and she secured 4th **place.ss**
- **MS.KAMALI G** has participated in the event "Marathon Freedom for Cyber Crime Against Women" conducted on 1st September 2024.

"Learning gives **creativity**, creativity leads to **thinking**, thinking provides **knowledge**, and knowledge makes you **great**."

Dr. APJ Abdul Kalam

The ideal of all education, all training, should be this man-making. But, instead of that, we are always trying to polish up the outside.

—Swami Vivekananda