FDPs/Workshops/Guest lecture attended by faculty……

- Dr. Moirangthem Santoshkumar Singh, attended "DRDO-Sponsored Workshop on Metamaterial Antennas & Applications," Organized by: Department of Electrical Engineering, IIT Kanpur, under the Aegis of DRDO-Industry-Academia Centre of Excellence (DIA-CoE), IIT Kanpur, 18 to 20 April 2025.

Publications ….

- Kapileswar, N., Vardhan, Ravi Raja, A. et al. Analytical study for I–V characteristics of solar cell panel system behavior and performance efficiency evaluation under the effect of environmental physical parameters in the infrared region. J Opt (2025). https://doi.org/10.1007/s12596-025-02476-2

- Kota Nageswara Rao, and Kalpana Naidu. "Efficient UAV deployment and resource optimization for enhanced data rates in CDRT-NOMA." Physical Communication (2025): 102696. 10.1016/j.phycom.2025.102696

- Moirangthem Santoshkumar Singh, Jeet Ghosh, Soumendu Ghosh & Abhishek Sarkhel, "A compact dual-polarized triple-band antenna for implantable Biotelemetry applications," Journal of Electromagnetic Waves and Applications (2025) DOI: 10.1080/09205071.2025.2493161.

Conferences…..

- Ravi. Raja. Akurathi, V. R. P. K, S. Dasam, Y. S, U. R. M and A. V. Pushpavathi, "Raspberry Pi: A Cost-Effective System for Real-Time Number Plate Recognition using Rear-View Cameras," 2025 International Conference on Multi-Agent Systems for Collaborative Intelligence (ICMSCI), Erode, India, 2025, pp. 361-367, doi: 10.1109/ICMSCI62561.2025.10894189.

- Lakshmi Sowjanya Koneru, Shravya Manchala, Prakash Kodali, "Compressor-Based Approach for Power-Optimized Error-Tolerant High Accurate Approximate Multipliers Design and Implementation" 2025 10th International Conference on Signal Processing and Communication (ICSC), JIIT, Noida, UP, India, 2025, pp.773 - 777 DOI: 10.1109/ICSC64553.2025.10967968.

- Lakshmi Sowjanya Koneru, Bodigam Chaithanya, Prakash Kodali, "Optimised Power-Efficient Design of Approximate Multiplier Using Approximate Compressor", 2025 10th International Conference on Signal Processing and Communication (ICSC), JIIT, Noida, UP, India, 2025, pp.856 - 861, DOI: 10.1109/ICSC64553.2025.10967670.

Publications with students…….

- Ravi Raja. Akurathi, A. Ram Mohith, S. Shaman, K. Harshith, J. Simon and N. Kapileswar, "A Review of Skin Cancer Detection: Methodologies, Evaluation Metrics, Research Challenges, and Future Prospects," 2025 International Conference on Electronics and Renewable Systems (ICEARS), Tuticorin, India, 2025, pp. 1492-1497, doi: 10.1109/ICEARS64219.2025.10940837.
- Lakshmi Sowjanya Koneru, Sunkara Baby Usha, Purushottam Vamsi Nagendra, Sammeta Urvasi Mani, "Enhancing Digital Circuit Efficiency with Memristor-CMOS Hybrid Technology", 2024 OITS International Conference on Information Technology (OCIT), SRM University, AP, pp 641 - 646, doi: 10.1109/OCIT65031.2024.00117.

Faculty Achievements….

Dr. A Ravi Raja was awarded a PhD degree from SRMIST, Chennai in the month of March 2025. Thesis Title: "Advanced Strategies in Sleep Stage Classification based on Deep Learning and Ensemble Approaches using EEG" He received a grant of Rs.4 Lakhs as Co-Principal Investigator, to establish a PNT Lab in SAHE, from IIT Tirupati under IIT Tirupati Navavishkar I-Hub Foundation (IITTNiF) Scheme. Received in April 2025.

Dr. Moirangthem Santoshkumar Singh received an approval of Rs 57,27,480/- from Anusandhan National Research Foundation - Inclusivity Research Grant (ANRF-IRG) as a Principal Investigator (PI) for the project titled "Implementation of Characteristic Mode Analysis in Designing Miniaturized Implantable Antenna for Biomedical Applications."

Dr. S Tina Mrudula was awarded a PhD degree from JNTU Anantapur, in the month of March 2025. Thesis Title: "VLSI Architecture for High Throughput and Memory Efficient Adaptive Binary Range Coder"

Industrial Visit

On the 21st and 22nd of April, Dr. G.L. Madhumati, Professor and Dr. B. Lakshmi Sirisha, Associate Professor of ECE steered for an insightful industrial visit to several prominent companies in Hyderabad, aimed at fostering academic and professional collaborations. The visit began with a meeting at MMRFIC Technology Pvt. Ltd., where discussions focused on potential internships, guest lectures, and placement opportunities, particularly for students with an antenna background. The team also met with alumni Mr. Rajasekharam Naidu P, Founder of BITSILICA, where they explored internship and placement opportunities, including the potential for collaboration on guest lectures. At Saanvika Solutions, a startup specializing in Machine Learning, the focus shifted to project collaborations, internships, and industry exposure for students. On the second day, the visit included discussions with Signion Systems Pvt. Ltd. on defense-related projects and job opportunities for M. Tech students proficient in MATLAB and signal processing. The team also visited Qualcomm and AMD, where the prospects for internships, placements, and networking were highlighted. Finally, at Ananth Technologies Pvt. Ltd., discussions centered around placement drives and value-added courses for B. Tech students. The visit concluded with a meeting at Jawaharlal Nehru Technological University, where guidance on pursuing international collaborations and further industry tie-ups was received. This visit has paved the way for numerous exciting opportunities for both students and faculty.

Program Outcomes

PO1	**Engineering knowledge:** An ability to apply knowledge of mathematics, science, fundamentals of engineering to solve electronics and communication engineering problems.
PO2	**Problem analysis:** An ability to identify, formulate and analyze electronics and communication systems reaching substantiated conclusions using the first principles of mathematics and engineering sciences.
PO3	**Design/development of solutions:** An ability to design solutions to electronics and communication systems to meet the specified needs.
PO4	**Conduct investigations of complex problems:** An ability to design and perform experiments of complex electronic circuits and systems, analyze, and interpret data to provide valid conclusions.
PO5	**Modern tool usage:** An ability to learn, select and apply appropriate techniques, resources and modern engineering tools for modelling complex engineering systems.
PO6	**The engineer and society:** Knowledge of contemporary issues to assess the societal responsibilities relevant to the professional practice.
PO7	**Environment and sustainability:** An ability to understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.
PO8	**Ethics:** An understanding of professional and ethical responsibilities and norms of engineering practice.
PO9	**Individual and team work:** An ability to function effectively as an individual, and as a member in diverse teams and in multidisciplinary settings.
PO10	**Communication:** An ability to communicate effectively with engineering community and with society at large.
PO11	**Project management and finance:** An ability to demonstrate knowledge and understanding of engineering and management principles and apply these to manage projects.
PO12	**Life-long learning:** An ability to recognize the need for, and engage in independent and life-long learning in the broadest context of technological change

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