

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

IEEE International Conference



MARIAN ENGINEERING COLLEGE

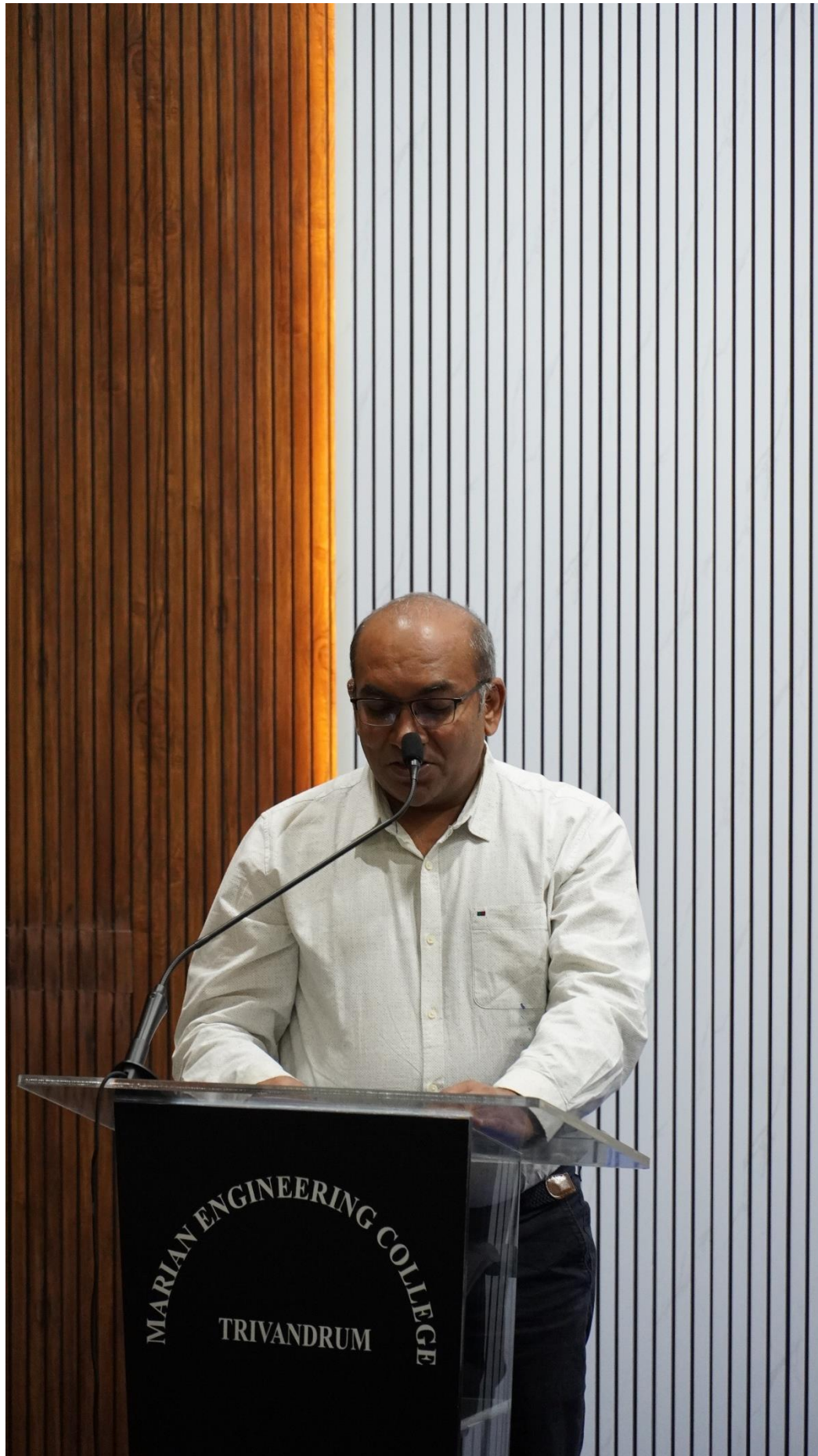
TRIVANDRUM

The University of Texas at Austin
Cockrell School of Engineering

nanoML: Pushing the Limits of Edge AI with Weightless Neural Networks

Lizy Kurian John
Laboratory for Computer Architecture (LCA)
The University of Texas at Austin
ljohn@ece.utexas.edu

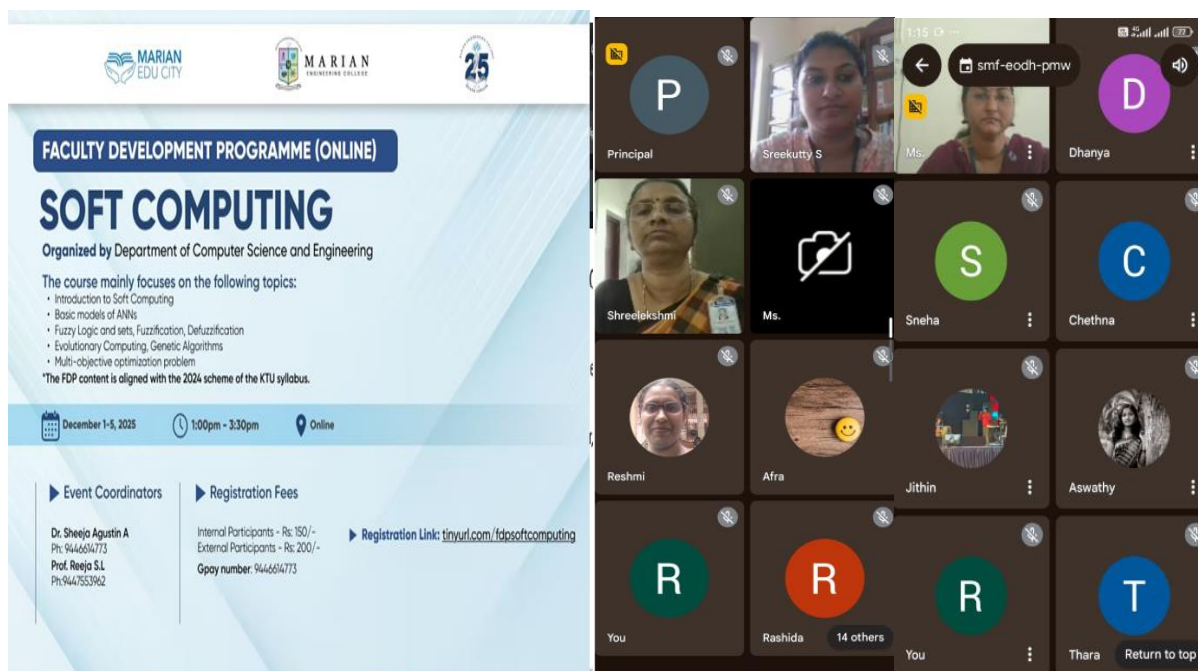






As part of the Silver Jubilee celebrations, the IEEE International Conference (SISCON 2025) organized on the topic of Smart and Intelligent Systems on December 19th and 20th at the college campus was inaugurated by Kerala State IT Mission Director Shri Sandeep Kumar IAS. Archbishop Rev. Dr Thomas J Netto, Manager Rev. Dr. A R John, Principal Dr. Abdul Nizar M, IEEE Kerala Section Representative Dr. Deepak Mishra, Dean Dr. Samson, Rev. Father Jim Carvin, Organizing Secretary Dr. Shreelekshmi R were present at the inaugural ceremony. Dr. Lizzy Kurian John, University of Texas, Austin, and Dr. Vivek Balachandran, Singapore Institute of Technology delivered keynote speeches on the topics of Nano Machine Learning and Quantum Computing for Code Security. A total of 587 papers were received from prestigious institutions, including NITs, IITs, and foreign universities. After a rigorous multi-level peer review process involving 216 reviewers, 85 papers were selected for presentation. Representatives from various countries presented about 85 research papers on scientific and technological topics.

FDP Organized



The Department of Computer Science and Engineering, Marian Engineering College, successfully organized five-day online Faculty Development Programme (FDP) on Soft Computing from 1-12-2025 to 5-12-2025. The programme aimed to enhance participants' understanding of emerging soft computing techniques and their applications in solving complex real-world problems. The FDP covered key topics such as the Introduction to soft computing, Basics of Artificial Neural Networks, Fuzzy logic and its operations including Fuzzification and Defuzzification, Evolutionary Computing, Genetic Algorithms and Multi-objective optimization problems. The sessions were well aligned with the 2024 S4 CSE KTU syllabus, making them highly relevant for faculty members. The sessions were handled by Ms. Beena Lawrence, Research Scholar, University of Kerala, Dr. Sheeja Agustin, Prof. Reeja S L, Prof. Swapna H and Dr. Anusha B of Marian Engineering College. The FDP was Co-ordinated by Dr. Sheeja Agustin and Prof. Reeja S L.

Smart India Hackathon (SIH 2025)

The banner features logos at the top for the Ministry of Education, Government of India; ANTE; MoE's INNOVATION CELL (GOVERNMENT OF INDIA); and SMART INDIA HACKATHON 2025. On the left is the SIH 2025 logo. The central text reads: **Marian Engineering College**, **Conducting Internal Prelims for SIH 2025**, **On Thursday, 25/09/2025 | 9:30 AM to 7:30 PM**, and **Venue: Benziger Hall**. On the right is the Marian Engineering College logo. The bottom section states: **Internal Institute Level HACKATHON - 2025** and **SIH Screening Process**.





The College Level Internal Hackathon is conducted on 25th September 2025 from 9:00 AM to 7:30 PM at Benziger Hall. A total of 25 teams participated in the event and its evaluation was done with two panels of judges including external and internal members on 26th September 2026. A total of 16 teams were selected and applied for SIH 2025

Students Achievements



Anagha D S of S1R1, secured two Silver Medals in Kumite at the District Karate Championship, which was held on 27th and 28th December 2025.



Sreehari S J of S4R1 (2024 - 28 R1 batch) is titled as "IBR ACHIEVER" By INDIAN BOOK OF RECORDS for creating an Artificial Intelligence system to that extracts and decodes human gesture information from Wi-Fi signal propagation and channel variations, without the use of cameras or physical sensors, with a measured performance accuracy of 90.2%.



Aditi Ghosh of S6R1 got her poetry published in the anthology Purple Nights by Writer's Pocket.

Staff Achievements

Best Paper Award



Prof. Swapna H received a best paper award for the paper entitled “Multimodal Fake News Detection Using OCR and Image Captioning with Semantic Similarity Assessment” in the IEEE International Conference on Data science and Network Computing hosted by National Institute of Technology, Raipur, Chattisgarh.

Mr.Samuel Maju , Mr.Aby Thomas and Mr.Sangeeth Siva (2025 Mechanical pass out minor students) and Prof. Keerthi Krishnan presented a Research Article titled "Enhancing Aerodynamic Prediction of Airfoils Using Advanced Machine Learning Models" and received the Best Paper Award in the Advanced Computing Session under Machine Learning track in IEEE international conference on Smart and Intelligent Systems (SISCON 2025) organized by Marian Engineering College, Trivandrum on 19th and 20th December 2025.



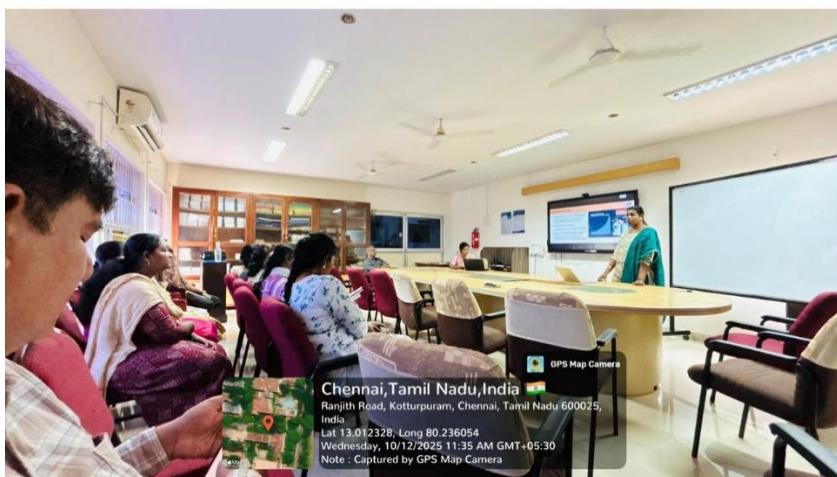


Dr.Shreelekshmi R got an appreciation by Dr Bindu, Higher education minister for being a patent holder from College of Engineering , Trivandrum.



Prof. Keerthi Krishnan submitted phd thesis titled " An Intelligent Research Support System For Research Area Identification and Scientific Article Summarization" in Anna University Chennai on 18th December 2025.

Resource Persons



Prof. Keerthi Krishnan taken a seminar titled "A Hybrid Research Support System for Novice Researchers" in the department of CSE, Anna University, Chennai on 10th December 2025.

Dr. Sheeja Agustin , Prof. Reeja S L, Prof. Swapna H and Dr. Anusha B were the resource persons for the FDP on Soft Computing conducted by Department of Computer Science & Engineering , Marian Engineering College from 1-12-2025 to 5-12-2025.

Reviewer for Conferences

Dr. Sheeja Agustin & Dr. Anusha B served as reviewer for IEEE International Conference (SISCON 2025) organized on the topic of Smart and Intelligent Systems on December 19th and 20th at Marian Engineering College and she also served as session chair and session co-chair of SISCON 2025.

Prof. Reeja S L, Prof. Swapna H & Prof. Renetha J B served as reviewer for International Conference on Sustainable Technologies and Sciences for a Better Future conducted by LBS Institute of Science & Technology, Poojappura

Association Programmes



MACS organised a talk on "Smart Career Mapping" in association with Simple Logic Solutions Pvt. Ltd and CGP career Avenues for first year students on October

Technical Talk

Dr. Philomina Simon of Department of Computer Science, University of Kerala delivered a talk on "Strengthening Research Skills to Enhance Scholarly Productivity on 27-11-2025.

Conclave





Prof.Keerthi Krishnan and Prof.Rojitha Abdulla attended a one day conclave "Recode kerala - VISION 2031" shaping the future of Kerala's IT Industry organized by ICTAK and various kerala IT industries at kinfra International convention centre, Infopark, Kochi on 28th October 2025

Paper Publications



Dr. Sindhu Chandra Sekharan has published the following research papers between October 2025 to December 2025

1. MCALHA: Multimodal Conversational AI for Lung Health Assessment. In: Tuba, M., Akashe, S., Joshi, A. (eds) ICT Systems and Sustainability. ICT4SD 2025. Lecture Notes in Networks and Systems, vol 1645. Springer, Cham. https://doi.org/10.1007/978-3-032-06662-6_21.
2. APTSum: AI-Powered Timestamp Based Summarization. In: Tuba, M., Akashe, S., Joshi, A. (eds) ICT Systems and Sustainability. ICT4SD 2025. Lecture Notes in Networks and Systems, vol 1645. Springer, Cham. https://doi.org/10.1007/978-3-032-06662-6_23.
3. Vastra Kalpana: AI-Driven Generative Model for Saree Design Creation. In: Tuba, M., Akashe, S., Joshi, A. (eds) ICT Systems and Sustainability. ICT4SD 2025. Lecture Notes in Networks and Systems, vol 1647. Springer, Cham. https://doi.org/10.1007/978-3-032-06668-8_18.
4. Experimental Implementation of Combustion Ignition Metrics Using Machine Learning Algorithms. In: Swaroop, A., Kansal, V., Hassanien, A.E. (eds) Proceedings of Sixth Doctoral Symposium on Computational Intelligence. DoSCI 2025. Lecture Notes in Networks and Systems, vol 1496. Springer, Singapore. https://doi.org/10.1007/978-981-96-8107-5_20.
5. SortIT: Sorting Images Based on Similarity Using Vision Transformers. In: Swaroop, A., Kansal, V., Hassanien, A.E. (eds) Proceedings of Sixth Doctoral Symposium on Computational Intelligence. DoSCI 2025. Lecture Notes in Networks and Systems, vol 1496. Springer, Singapore. https://doi.org/10.1007/978-981-96-8107-5_30

FDP Attended

Prof. Renetha J B participated in one day FDP on “Redefining teaching strategies on 30-10-2025 organised by Lourdes Matha College of Science and Technology Trivandrum and she also participated in three days FDP on "Industrial transformation through blockchain, smart manufacturing, electrical energy trading and sustainable development organized by Mohandas college of Engineering and Technology from 17-11-2025 to 19-11-2025.

Dr. Sheeja Agustin ,Prof. Keerthi Krishnan, Prof.Reeja S L, Prof.Sunitha S, Prof.Renetha J B, Prof. Binsi P & Prof. Rashmi M has actively participated in FDP on “NEXT GENERATION AI:EXPLORINGG THE POWER OF NLP, COMPUTER VISION AND GENERATIVE MODELS “ organized by the Department of Computer Science and Engineering, Vimal Jyothi Engineering College on 10-11-2025 to 15-11-2025.

Prof. Keerthi Krishnan, Prof. Reeja S L, Prof. Nitha L R, Prof. Nisha J R, Prof. Renetha J B and Prof. Binsi P attended two days ISTE FDP on “Lifestyle management” on 10-11-2025 & 11-11-2025 at Marian Engineering College.

Prof.Revathi B R has participated in the three day online faculty development programme on “Intelligent NLP & Vision Systems” organized by Department of Computer Science & Engineering,Muslim Association College of Engineering from 24-11-2025 to 26-11-2025.

Prof.Keerthi Krishnan, Prof. Aiswarya I P and Prof.Harsha has participated in the five-day faculty development program on “Modern Computing & Intelligent Systems” organized by the Department of Computer Science & Engineering in association with the Institution’s Innovation Council, held from 25-11-2025 to 29-11-2025 at Mahaguru Institute of Technology

Prof. Aiswarya I P and Prof. Harsha participated in the faculty development program on Exploring Generative AI:Models,Applications and Innovations” organized by the Department of Computer Science & Engineering, St.Thomas College for Science & Technology, Thiruvananthapuram, in collaboration with Tata Consultancy Services held from 24-11-2025 to 26-11-2025.

Prof.Rojitha Abdulla participated in a faculty development program on “A Systematic Way of Research Paper Writing “ from 25-11-2025 to 29-11-2025.

Prof. Sunitha S , Prof. Nitha L R, Prof. Binsi P ,Prof.Dhanya L, Prof.Revathi B R, Prof.Rashmi M K, Prof.Renetha J B, Prof. Sreekutty S Vinod, Prof. Diphonsa Uvanse U V and Prof. Jithin

Aniyankunju has attended the five day faculty development Program on Soft Computing, organized by Department of Computer Science & Engineering from 1-12-2025 to 5-12-2025.

Prof. Aswathy G S participated in the faculty development program on “Demystifying Generative and Agentic AI” organized by Department of Computer Science & Engineering, S.A. Engineering College, Chennai from 1-12-2025 to 5-12-2025.

Prof. Sunitha S and Prof. Dhanya L participated in 5 day FDP on "Advances in LLMs: From Deep Learning to Generative AI" organized by Dept of Computer science and Engineering, College of Engineering, Muttathara from 15/12/2025 to 19/12/2025 and she also participated in five day FDP on Next Generation AI organized by KHSEC from 10/11/2025 to 15/11/2025.

Prof. Mary Lisa attended two day National Level FDP on Robotics and AI on 27-12-2025 & 28-12-2025 organized by Learnix Thrive.

Christmas Celebration





The Department of Computer Science & Engineering celebrated Christmas in a joyful spirit on 17-12-2025. The programme began with a meaningful Christmas message delivered by the Head of the Department, highlighting the values of love, compassion, sharing, and unity that Christmas symbolizes. Adding to the cheer of the occasion, a Christmas Friend gift exchange was conducted among the faculty members. The activity brought smiles, laughter, and a spirit of togetherness, making the celebration more engaging and memorable.