

DEPARTMENT OF
**COMPUTER SCIENCE
AND ENGINEERING**

Department Bulletin

VISION

To be a Centre of Excellence in Computer Science and Engineering providing quality education and research for the betterment of the society.

MISSION

To impart sound knowledge in theoretical and applied foundations of Computer Science and Engineering, and to train the students to solve real life issues to effectively define and shape life.

APPOINTED AS HoD



Dr. Anne Dickson, Associate Professor in the Department of Computer Science and Engineering, assumed charge as the Head of Department, effective from July 1st, 2026.

ORGANIZED INTERNSHIP ON “AGENTIC AI – BUILDING AUTONOMOUS INTELLIGENT AGENTS”



The Department of Computer Science and Engineering successfully organised a six-day internship program, “Agentic AI – Building Autonomous Intelligent Agents,” which saw the involvement of 55 students from various institutions, including School of Engineering at CUSAT, Bishop Jerome Institute, Marian Engineering College, and Sree Chitra Thirunal College of Engineering. The program offered hands-on training in Transformer Architecture, Large Language Models (LLMs), Prompt Engineering, RAG, AI Agents, GraphRAG, Multi-Agent Systems, and Workflow Automation using n8n.

Faculty Coordinators: **Ms. Diana Mathew & Ms. Vinitha V. K.**, Assistant Professors, Department of CSE.

PARTICIPATED IN DISTRICT LEVEL ATHLETIC COMPETITION



Ms. Karishma T. Prasad of S5 CS1 and **Ms. Sherry Shaji Thomas** of S3 CT achieved eighth and sixth places, respectively, in the 1500 m race at the District-Level Athletic Competition held in Trivandrum on July 3, 2026. The event was organised as part of the Border Security Force's Diamond Jubilee celebrations (Spandan League 2026) at the LNCPE Stadium, Kariavattom.

ONLINE WORKSHOP ON RESEARCH PAPER WRITING



CSI SB MBCET, in collaboration with IEEE CS SBC, hosted an online workshop titled “Beyond the Draft: A Guide to Effective Research Paper Writing” on June 29, 2026, at 11:00 AM. Around 45 students attended the session, which covered research paper writing, IEEE formatting standards, conference and journal submission, citation practices, plagiarism prevention, and publication strategies.

Dr. Lani Mathew, Associate Professor in the Department of Electronics and Communication Engineering, led the session. The workshop gave participants valuable insights into academic writing and the publication process, inspiring them to pursue quality research and scholarly publications.

PhD AWARDED



Ms. Dhanya L. K., Assistant Professor in the Department of CSE, guided by Dr. B. Kannan from Cochin University of Science and Technology, successfully defended her thesis titled *"Hate Speech Detection in Malayalam-English Code-Mixed data using Machine Learning Techniques"*.

PARTICIPATED IN GLOBAL STUDENT SUSTAINABILITY PROGRAM 2026, SINGAPORE



Mr. Aditya Dileep, from S7 CT, successfully participated in the prestigious Global Student Sustainability Program 2026 in Singapore, held from June 29, 2026 to July 5, 2026. Hosted at Ngee Ann City, the initiative provided him with deep insights into advanced theoretical frameworks for environmental stewardship and the practical implementation of sustainable policies across key industries. A significant highlight of his involvement was the

Ideathon organized by WSP Consultancy, during which he developed and presented an innovative, technology-based framework to optimize Singapore's urban waste management system.

AWARENESS SESSION ON “HOW TO IMPLEMENT AI PROJECTS”



An informative session on “How to Implement AI Projects” was held for the final-year students of Computer Science and Engineering (Artificial Intelligence) by **Ms. Swapna Iyer**, the Founder of The LAB (Let All Build) Company based in California, United States. The session equipped students with practical insights on recognising real-world AI problems, selecting appropriate technologies and tools, structuring project workflows, and developing industry-relevant AI solutions. Faculty Coordinator: **Dr. Tessy Mathew**, Professor & Dean (Student Affairs), Department of CSE.

FACULTY INDUSTRIAL VISIT TO APPELXUS TECHNOLOGIES



The ISTE MBCET Faculty Chapter organized an Industrial Visit to Applexus Technologies, Technopark, Thiruvananthapuram, on July 14, 2026, for the faculty members of MBCET. A total of 15 faculty members from different departments participated in the programme. The visit offered significant insights into emerging technologies, industry best practices, digital transformation, and the evolving skill requirements of engineering graduates, while also offering opportunities for industry and academia collaboration and curriculum enhancement.



The visit was coordinated by **Ms. Asha S.** (Chairman, ISTE MBCET Faculty Chapter & Associate Professor, Department of CSE) and **Ms. Poorna B. R.** (Secretary, ISTE MBCET Faculty Chapter & Assistant Professor, Department of CSE).

ORGANIZED FDP ON “NEXTGEN AI TECHNOLOGIES FOR SMART TEACHING AND INTERDISCIPLINARY RESEARCH”

THE EDUCATIONAL TRANSFORMATION

1. INFORMATION AGE (1980s – 2000s)	2. KNOWLEDGE AGE (2000s – 2020s)	3. INTELLIGENCE AGE (2020s – PRESENT)
How do we access information?	How do we organize and use information?	How can machines assist human thinking?
- Computers became widespread - Internet connected the world - Information became digitized and accessible	- Search engines improved access - Data analysis emerged - Online learning platforms expanded	- AI can analyze, predict, generate, and recommend - Systems learn from data - Human-AI collaboration becomes common
EXAMPLES Encyclopedias → Wikipedia Libraries → Digital repositories Letters → Email	EXAMPLES Google Books MOOCs Learning Management Systems	EXAMPLES ChatGPT • AI Tutors • Research Assistants Personalized Learning Systems
CHALLENGE Too much information, but limited ability to derive insights	FOCUS Connecting information with usable knowledge	FOCUS Competing knowledge with autonomous intelligence

Dr. Manjula Devananda

AI FOR TOPIC SELECTION AND REFINEMENT

AI can help researchers move from a broad area to a focused research topic.

Broad area: AI in libraries
Refined topic: Use of AI Tools for Reference Services in Academic Libraries in Kerala
Further refinement: objectives, research questions, hypotheses, variables.

Dr. Gopakumar Velayudhanpilla

LLMs are inherently stateless

LLMs are inherently stateless → Every prompt must carry all necessary information.

RAG / Conversation (turn) history	In-Context Learning (ICL)	Help it reason	Role/Persona + Generated Knowledge	Reasoning and Actions (ReACT)
Retrieval-Augmented Prompting RAG incorporates external documents to provide up-to-date and fact-based context in AI-generated responses.	Zero-Shot Prompting Zero-shot prompting asks the model to perform tasks without any example input-output pairs provided.	Chain-of-Thought Prompting CoT encourages step-by-step reasoning, improving model accuracy on tasks needing logical and multi-step problem solving.	Role or Persona Prompting Assigning a specific role guides the model's tone, style, and expertise for tailored responses.	ReAct Technique Overview ReAct integrates reasoning with actions, enabling models to interact with external APIs or tools in workflows.
Turn history Conversation or "turns" history for continuity of operation/conversation.	Few-Shot Prompting Few-shot prompting guides the model using a few example input-output pairs to improve task accuracy.	Tree-of-Thought Prompting ToT prompting explores multiple reasoning paths like a decision tree to enhance planning and decision-making.	Generated Knowledge Prompting Asking the model to list relevant facts before answering promotes structured, fact-based responses.	Program Aided Program aided prompts enables models to generate and execute code, solving complex computational tasks efficiently.
Prompt Compression Summarizing previous context helps overcome token limits, ensuring continuity in extended conversations.	Importance of Context Both prompting techniques show how context and examples affect the model's ability to generate and output accurately.	Self-Consistency Technique Self-Consistency generates multiple reasoning paths and selects the majority answer to reduce errors.	Benefits of Prompting Techniques Both prompting methods enhance context-rich and domain-specific AI outputs for clearer communication.	Enhanced Depth and Accuracy These prompting techniques improve the depth and accuracy of AI responses in complex scenarios and tasks.

Viju Chacko

The Department of Computer Science and Engineering, in collaboration with the Centre for Computational Intelligence and Cybersecurity, successfully organized a six-day Faculty Development Programme (FDP) on “NextGen AI Technologies for Smart Teaching and Interdisciplinary Research” from June 15, 2026 to June 20, 2026, in hybrid mode. A total of 65 participants, including faculty members, researchers, and industry professionals from various institutions, attended the FDP and actively engaged in the sessions. The programme featured enlightening sessions presented by a distinguished panel of experts, including **Dr. Manjula Devananda** (PES University), **Mr. Santhosh Kurup** and **Dr. Gopakumar V.** (Digital University Kerala), **Dr. Udmale Sandeep Sambhaji** (VJTI, Mumbai), **Dr. Aneesh G. Nath** (TKM College of Engineering), **Mr. Viju Chacko** (Air India Limited), and **Mr. Binu A.** (Rajagiri School of Engineering and Technology). The faculty coordinators are **Dr. Priya Mariam Raju** and **Dr. Bindhya P. S.**, Assistant Professors, Department of Computer Science and Engineering.

FACULTY INTERACTION WITH OUTSIDE WORLD

SERVED AS REVIEWER

- **Dr. Anne Dickson**, Associate Professor in the Department of Computer Science and Engineering, acted as a reviewer for the Third International Conference of the IEEE Kerala Section, titled “Trends in Engineering Systems and Technologies” (ICTEST 2026). The Government Model Engineering College in Thrikkakara, Kochi, Kerala, hosted the event, which took place from July 16, 2026 to July 18, 2026.
- **Dr. Dhanya L. K.**, Assistant Professor in the Department of CSE, fulfilled the role of Reviewer for the International Conference on Computational Intelligence Systems and Devices (ICCISD 2026) which was hosted by the Department of Computer Science & Applications, Sharda School of Computing Science & Engineering, Sharda University.

FACULTY AS RESOURCE PERSONS



- **Mr. Ramjith R. P.**, Assistant Professor in the Department of CSE, served as the Resource Person for a session on “AI for Teachers” conducted as part of an In-House Teachers’ Training Programme at Christ Nagar Central School, Kowdiar, Trivandrum. The programme engaged 120 teachers and focused on the effective integration of Artificial Intelligence tools and technologies in teaching and learning practices.
- **Dr. Jesna Mohan**, Associate Professor in the Department of CSE, **Dr. Dhanya L. K.**, Assistant Professor, Department of CSE, and **Ms. Prathibha S. Nair**, Associate Professor, Department of CSE, served as resource persons for the five day Faculty Development Programme (FDP) on “Python Programming and Its Applications”. This event was collaboratively organised by the Department of Computer Science & Engineering, and Department of Artificial Intelligence & Machine Learning, Mohandas College of Engineering and Technology, Nedumangad from June 2, 2026 to June 6, 2026.
- **Dr. Tessy Mathew** (Professor, Department of CSE), **Dr. Jesna Mohan** (Associate Professor, Department of CSE), **Dr. Dhanya L. K.**, **Dr. Neena Raj N. R.** and **Dr. Priya Mariam Raju** (Assistant Professors, Department of CSE) served as resource persons for the sessions on “Python for Data Science”, “Introduction to Feature Engineering and Clustering”, “Sequential Data Processing using Deep Learning”, “Introduction to Deep Learning in Computer Vision”, and “Regression and Classification Algorithms in Machine Learning”, respectively. These sessions were organized by National Skill Training Institute (Women) as part of the ISRO Technical Training Programme on “Artificial Intelligence/Machine Learning/Data Analytics using Python”, held from June 8, 2026 to June 12, 2026.
- **Dr. Dhanya L. K.**, Assistant Professor in the Department of CSE, acted as a resource person for the UGC–Malaviya Mission Teacher Training Centre (MMTTC), University of Kerala, on July 13, 2026, delivering an expert lecture on “Advanced Neural Networks for Natural Language Processing: From RNNs to Modern NLP Architectures” as part of the Refresher Course focusing on Integrating Artificial Intelligence in Academic Excellence and Research for Science Faculty – Tools and Techniques.

FDP ATTENDED

- **Dr. Anne Dickson** (Associate Professor, Department of CSE), **Ms. Deepthi K. Moorthy**, and **Ms. Vinitha V. K.** (Assistant Professors, Department of CSE), attended a 6-day Hands-on Faculty Development Program on “Computer Networking using Linux: A Practical Approach” from June 8, 2026 to June 13, 2026 in Ernakulam organized by the Department of Computer Science & Design in collaboration with the R&D department at Viswajyothi College of Engineering & Technology in Muvattupuzha.
- **Ms. Poorna B. R.** and **Ms. Renjitha Radhakrishnan** (Assistant Professors, Department of CSE) completed the six-day Faculty Development Program on “Future Ready AI: Generative Models to Autonomous Agents” organized by the Department of Artificial Intelligence & Data Science, Sreepathy Institute of Management and Technology, from June 15, 2026 to June 20, 2026.
- **Ms. Diana Mathew** (Assistant Professor, Department of CSE) attended a six-day Faculty Development Program on “Generative AI in Software Engineering and DevOps: From Code Assist to Autonomous Agents” organized by LBS Institute of Technology for Women in association with TATA Consultancy Services (TCS) Academic Alliances Group from June 1, 2026 to June 6, 2026.
- **Ms. Gauri Shree V. K.** and **Ms. Vinitha V. K.** (Assistant Professors, Department of CSE) completed the six-day Faculty Development Programme on “Deep Learning Transformer Architecture and Intelligent Robotics”, conducted from June 22, 2026 to June 27, 2026, organized by the Department of Computer Science & Engineering, LBS Institute of Technology for Women, Poojappura.
- **Dr. Bindhya P. S.**, Assistant Professor, Department of CSE, attended an FDP on “Computer Networking using Linux: A Practical Approach” organized by Viswa Jyothi College of Engineering & Technology from June 8, 2026 to June 13, 2026.
- **Ms. Renjitha Radhakrishnan**, Assistant Professor, Department of CSE, attended an FDP on “Generative AI in Software Engineering and DevOps: From Code Assist to Autonomous Agents” organized by LBS Institute of Technology for Women, Trivandrum, from June 1, 2026 to June 6, 2026.
- **Dr. Anne Dickson**, Associate Professor, Department of CSE, has successfully completed the six-day Faculty Development Program on “Aligning Curriculum with Outcomes: A Strategic Approach under the new NBA Framework”, organized by Internal Quality Assurance Cell (IQAC), Rajagiri School of Engineering & Technology (Autonomous), Kochi, from June 1, 2026 to June 6, 2026.