St. Thomas College of Engineering & Technology
Vellilode, Sivapuram PO. Mattanur. Kannur District, Kerala
Approved by AICTE New Delhi, Govt. Of Kerala and Affiliated to APJ Abdul Kalam Technological University

GEEK-PRESS

Unveiling the World of Tech Wizards

DEPARTMENT OF
COMPUTER SCIENCE & ENGINEERING

Geekzone
Computer Science and Engineering Association

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GEEK-PRESS

UNVEILING THE WORLD OF TECH WIZARDS

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

VOL 4, ISSUE 1 AY-2025-2026

VISION OF THE DEPARTMENT

To produce globally competent and socially responsible Computer Science Engineers.

MISSION OF THE DEPARTMENT

M1: Professional Skills
Provide students with opportunities to become industry- ready professionals and entrepreneurs through analytical learning.

M2: Lifelong Learning
Maintain a lifelong learning attitude and stay current in their profession to foster personal and organizational development.

M3: Engage with Society
Encourage students to focus on sustainable solutions, to improve quality of life and social welfare.

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

PEO1. Professional Practices
Apply engineering practices required for Software development, Hardware development and Embedded systems.

PEO2. Intrapreneurial Skills
Exhibit innovation, Self – confidence and teamwork skills in the organization and society.

PEO3. Lifelong Learning
Offer continuing education programmes in the emerging areas for the knowledge upgradation of stakeholders.

PROGRAM SPECIFIC OUTCOMES (PSOS)

PSO1: Computer Science and Engineering students can analyse, design, develop, test and apply management principles, mathematical foundations in the development of computational solutions, making them experts in designing computer hardware and software.

PSO2: Develop their skills to solve problems in the broad area of programming concepts and appraise environmental and social issues with ethics and manage different projects in interdisciplinary fields.

PROGRAM OUTCOMES (POS)

Engineering Graduates will be able to:

PO1 Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2 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.

PO3 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.

PO4 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.

PO5 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.

PO6 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.

PO7 Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8 Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9 Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10 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.

PO11 Project management and finance: Demonstrate knowledge and understanding 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.

PO12 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.

EVENTS

HACKFEST 2K25 REGIONAL ROUND

Kannur, July 2, 2025 – The Department of Computer Science and Engineering at St. Thomas College of Engineering and Technology, Kannur, successfully hosted the regional round of "Hackfest 2K25," a national-level hackathon, conducted in online mode. The event served as a vibrant platform to bring together talented engineering graduates to collaborate and devise innovative solutions for pressing real-world problems.

The Hackfest Regional Round was conducted with PSGiTech as the Academic Partner and industry giants SAP and Nextgrid as the primary Industry Partners. These partnerships provided participants with an invaluable opportunity to engage with industry experts, mentors, and the judging panel, gaining insights and constructive feedback on their projects.

Teams were challenged to present their project ideas and implementation plans based on three critical themes:

Sustainable Business

Preventing Digital Fraud

Ethics in AI Models for Business

Out of the seven registered teams, which included "Armor Gaurd," "Cool and powerful," "Hashtag," "Marish," "Scamurai," "Tech Squad," and "Ziyas team," two teams were shortlisted for the next stage: Armor Gaurd and Scamurai. The evaluation, overseen by Jury Member Mr. Jithin S (AP CSE), focused on four key criteria: Ideation (relevance to the theme), Market Product Fit (market presence, competitor analysis), Team (presentation and internal structure), and Technology (stack, scaling, and deployment plan).

According to the post-event feedback analysis, participants experienced significant personal and team growth, successfully developing innovative ideas and broadening their perspectives on creativity. The event is expected to achieve several key outcomes, including identifying real-world problems, gaining access to new ideas, supporting meaningful causes, and expanding the community for future career opportunities. Ms. Vaishakhi V K served as the dedicated staff coordinator for the event.

ADRESSING RESEARCH CHALLENGES IN AI FOR SMART IOT APPLICATIONS

Kannur, September 8, 2025 - The Department of Computer Science and Engineering (GEEKZONE) of St. Thomas College of Engineering and Technology, Kannur, in association with the IEEE Students Branch, successfully hosted an Expert Talk on "Addressing Research Challenges in AI for Smart IoT Applications" on September 8, 2025.

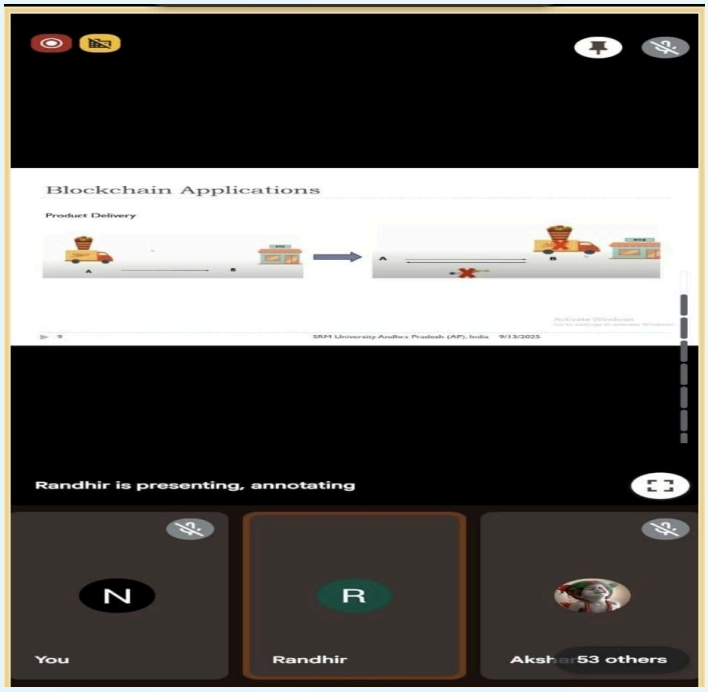
The session was led by the distinguished resource person, Dr. Sobin C C, Assistant Professor from the Department of CSE at SRM University, Andhra Pradesh. Dr. Sobin provided participants with a comprehensive overview of the current research landscape at the intersection of Artificial Intelligence and the Internet of Things. He focused on critical areas, including data privacy, security, interoperability, and the ethical implications of AI in IoT systems.

The talk was highly interactive and well-received, with participants praising the session as informative, engaging, and highly relevant to current industry trends.
In conclusion, the expert talk was a resounding success, serving as a crucial platform for bridging the gap between theoretical knowledge and cutting-edge industry research. The event successfully equipped attendees with the knowledge to identify and address real-world challenges, inspiring them to engage in further learning and research in this vital, rapidly evolving domain.

BLOCKCHAIN AND ITS FUTURE APPLICATIONS AND RESEARCH DIRECTIONS

Vellilode, Kannur – September 14, 2025 – The Department of Computer Science and Engineering (GeekZone) at St. Thomas College of Engineering and Technology, in association with the IEEE Student Branch (IEEE SB STM), successfully hosted an online workshop titled “Fundamentals of Blockchain and its Future Applications and Research Directions” on September 13, 2025, for S7, S5, and S3 students and IEEE members. The intensive, six-hour session, conducted via Google Meet, provided a comprehensive overview of blockchain, covering fundamentals, types, applications, smart contracts, and included practical insights through the implementation of a sample blockchain and a transaction recording demonstration.

Guided by a team of faculty, including Dr. Sreekesh Namboodiri T (HOD, CSE), Mr. Jithin S, and Ms. Saritha Narayanan, the event successfully enhanced participants' knowledge, offered practical understanding, and highlighted future research directions, signaling the department's commitment to engaging students in cutting-edge technological advancements.

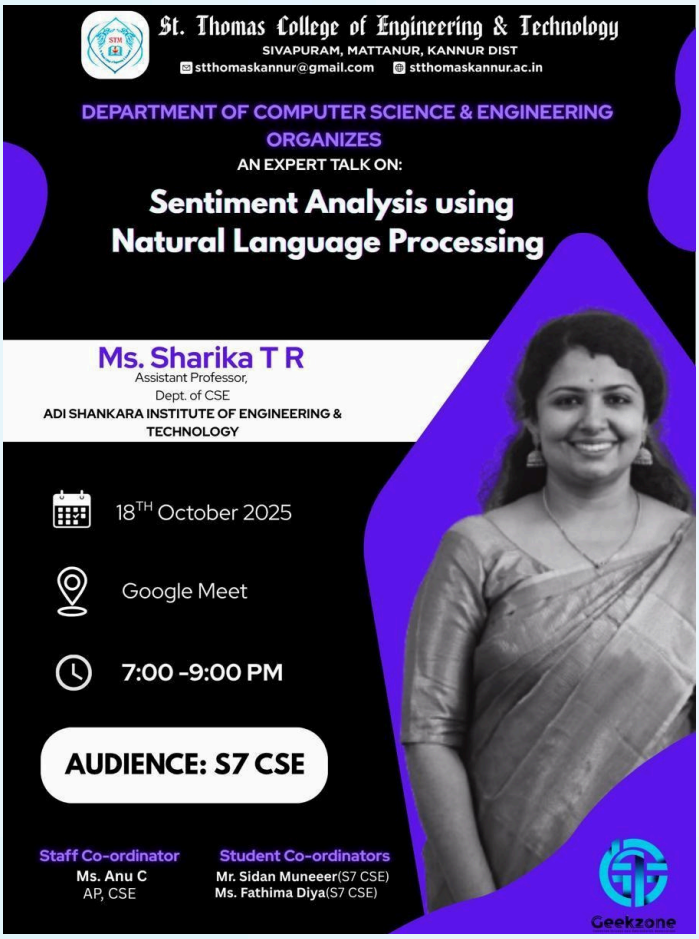


DIGITAL ELECTRONICS USING VLABS

A successful one-hour workshop titled “Digital Electronics Using VLabs” was held on September 12, 2025, at St. Thomas College of Engineering & Technology, in association with the VLabs Outreach Program Team, NITK-Surathkal.

The event, organized by the CSE, ECE, and CD departments for 173 second-year circuit branch students, was led by Ms. Shreshta and provided practical, hands-on exposure to fundamental digital electronics concepts. Key topics demonstrated using the interactive virtual lab platform included logic gates, arithmetic circuits (adders/subtractors), and sequential circuits (flip-flops, counters, and registers). The workshop aimed to bridge the theory-practice gap, receiving positive feedback for its innovative approach, high usefulness, and effectiveness in enhancing students' conceptual clarity, collaborative learning, and familiarity with modern simulation tools.

Expert talk on Sentiment Analysis using Natural Language Processing



The Department of Computer Science and Engineering organized a highly informative Expert Talk on Sentiment Analysis using Natural Language Processing on October 18, 2025, at 7:00 PM – 9:00 PM via Google Meet. The session was specifically tailored for the S7 CSE students to enhance their understanding of key concepts, tools, and methodologies in sentiment analysis.

The expert session was led by Ms. Sharika T. R., an Assistant Professor at Adi Shankara Institute of Engineering and Technology. Ms. Sharika T. R. is a distinguished academic with a brilliant record, including qualifying the UGC -NET Examination and achieving "First Runner Up" in the Art of Teaching 2.0 competition by GTech Mulearn.

The talk was designed to provide participants with an in-depth understanding of how NLP techniques can be applied to analyze and interpret human emotions, opinions, and attitudes expressed in textual data. Key areas covered included:

Foundational Concepts: Introduction to Sentiment Analysis and core NLP concepts.

Text Preprocessing: Overview of techniques like tokenization, stop-word removal, and stemming/lemmatization.

Feature Extraction: Explanation of methods such as Bag-of-Words, TF-IDF, and word embeddings.

Model Understanding: Insights into Machine Learning and Deep Learning Models used for sentiment analysis.

Real-World Applications: Demonstrating the use of sentiment analysis in domains like social media, product reviews, and customer feedback.

The session concluded with a Q&A session and an interactive mini-task for the participants.

The event was a great success, providing participants with a clear understanding of the core concepts of Sentiment Analysis and its relevance in NLP. The hands-on explanations were highly insightful, effectively bridging the gap between theory and practical application. Participants praised the resource person for presenting complex NLP methods in a simple, understandable manner.

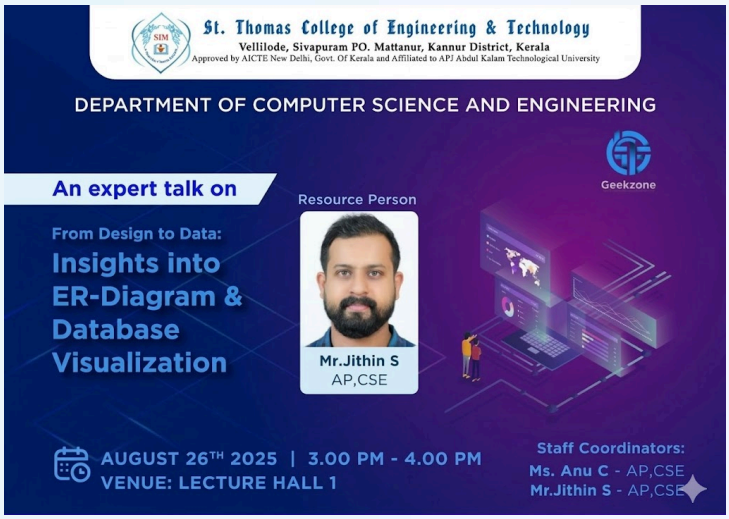
Expert talk on Memory Technologies Beyond Flip - Flops

On October 3, 2025, the Departments of Computer Science & Engineering (CSE) and CSE Data Science at St. Thomas College of Engineering & Technology, Mattanur, hosted an insightful expert talk titled "Memory Technologies Beyond Flipflops". The online session, which took place at 7:00 PM, was specifically designed for second-year students in the CSE and CD branches to broaden their understanding of advanced digital storage systems.

The program aimed to bridge the gap between theoretical classroom concepts and current industry practices by exploring alternatives to traditional flip-flop-based storage. Dr. Am, a resource person from Vimal Jyothi Engineering College, Chemperi, led the session. The curriculum focused on the architecture, operational principles, and applications of modern memory types, including SRAM, DRAM, Flash, and various emerging non-volatile technologies.

Participants gained comprehensive knowledge regarding the role of these advanced architectures in designing high-performance digital and embedded systems. By the end of the session, students were equipped to compare and evaluate different memory types, providing them with a critical foundation for future work in advanced electronic design. The event was coordinated by faculty members Ms. Saritha Narayanan and Ms. Anjana KP, with support from the respective Heads of Departments.

Expert talk on From Design to Data: Insights into ER-Diagram and Database Visualization



The Department of Computer Science and Engineering successfully hosted an expert talk titled "From Design to Data: Insights into ER-Diagram and Database Visualization" for the S3 CSE students. The session was designed to equip students with the essential knowledge and practical skills for effective data modeling and database management.

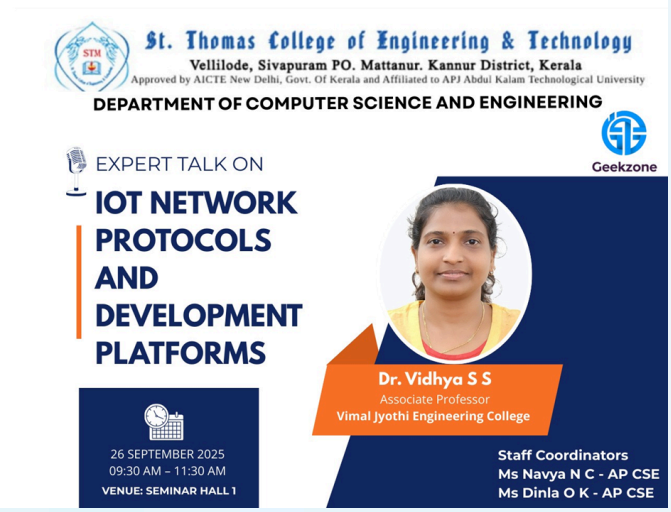
The session aimed to:

Provide students with a clear understanding of ER-Diagram concepts and their role in database design.

Enable students to represent real-world problems using entities, attributes, and relationships and translate them into database structures.

Equip participants with the ability to visualize data more effectively for better database design and management, boosting their confidence for academic projects and future professional work.

Expert Talk on IoT Network Protocols and Development Platforms



The expert talk on "IoT Network Protocols and Development Platforms" was organized by the Department of Computer Science and Engineering in association with GEEKZONE on 26th September 2025 at the Seminar Hall 1 for the students of classes S5 CSE.

The program aimed to introduce students to the fundamentals of the Internet of Things (IoT) and its wide range of real-world applications. The session covered essential IoT network protocols, enabling students to understand how devices communicate within IoT ecosystems. In addition, popular IoT development platforms such as Arduino, Raspberry Pi, and NodeMCU were discussed, highlighting their features, use cases, and relevance in modern IoT solutions

A key highlight of the program was the hands-on demonstration using Packet Tracer, which provided students with practical exposure to IoT network simulation and device configuration. The interactive nature of the session helped bridge the gap between theoretical concepts and practical implementation, enhancing students' technical knowledge and interest in IoT technologies.

Overall, the program was informative and engaging, equipping students with foundational knowledge and practical insights into IoT networking and development platforms.

IGNITE 2k25

ONAM 2k25


PRAKAMBANAM
2025
WEDNESDAY,
27 AUG.


St. Thomas
College Of Engineering & Technology

RESULT

Batch:-2022-2026

RESULT

Batch:-2023-2027

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