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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Unveiling the World of Tech Wizards

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Vol 1 , Issue 2

AY: 2022-2023

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.

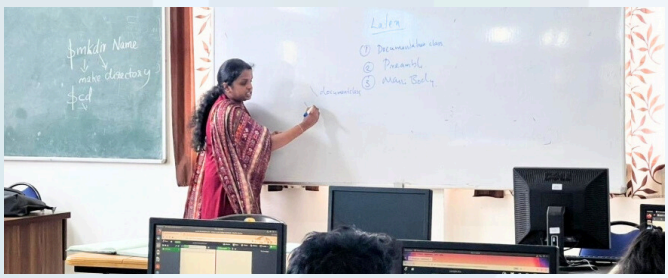
EVENTS

MASTERING LATEX SOFTWARE: A SCIENTIFIC DOCUMENT APPROACH

The Department of Computer Science and Engineering at St. Thomas College of Engineering & Technology organized a two-day Bridge Course in C Programming on March 9 and 10, 2023, from 8:50 AM to 4:40 PM at Seminar Hall 1 and the CSE Lab 1. The event, aimed at first-year students from CE, EC, ME, and CS departments, provided foundational training in problem-solving, algorithms, and the basics of C programming through theory and hands-on sessions. The sessions were led by esteemed faculty members, including Ms. Dhanyaja N, Ms. Anju G, Ms. Saritha Narayanan, and Ms. Vaishakhi V K, under the guidance of Principal Dr. Shinu Mathew John and CEO Er. Rijo Thomas Jose. Coordinated by Ms. Dhanyaja N, the program received an overwhelming response from students, with many praising its effectiveness and requesting more practical sessions in the future. This initiative highlighted the institution's commitment to bridging curriculum gaps and enhancing student skills for academic and placement success.

MASTERING LATEX SOFTWARE: A SCIENTIFIC DOCUMENT APPROACH

The Department of Computer Science and Engineering, in association with GeekZone, organized a hands-on workshop on "Mastering LaTeX Software: A Scientific Documentation Approach" on March 28 and 30, 2023, from 01:10 PM to 04:30 PM at the CSE Lab 1. The workshop provided participants with theoretical and practical knowledge of LaTeX, focusing on creating technical documents like research papers, theses, and presentations. Topics included basic commands, figures, tables, equations, and Beamer presentations. The event was coordinated by Ms. Dinla O K (AP, CSE, STM), with student coordinators Sivanth P K and Sheetal Madhu (S4 CSE). Resource persons Ms. Dinla O K and Ms. Anu C (AP, CSE, STM) guided the sessions. Sixty-two students from the CSE department actively participated, gaining confidence in scientific documentation using LaTeX.



Feedback from participants highlighted the effectiveness of the session, with several students requesting more workshops and improved network support. The department extends its gratitude to the HOD, faculty members, and participants for their contributions to the success of this event.

CSE DEPARTMENT ASSOCIATION: GEEKZONE INAUGURATION AND EXPERT TALK ON INNOVATION, ENTREPRENEURSHIP AND FUNDING FOR TECHNICAL PROJECTS

The Department of Computer Science and Engineering at St. Thomas College of Engineering and Technology, Vellilode, Sivapuram, recently inaugurated its department association, "GEEKZONE," on November 2, 2022. The inauguration was held in association with IEDC STM and featured an insightful expert talk on "Innovation, Entrepreneurship, and Funding for Technical Projects."

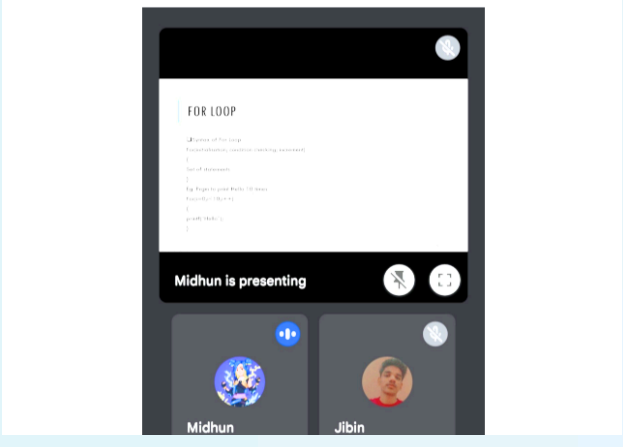
The event welcomed Dr. N.S. Sreekanth, Associate Professor and Head of the IT Department at Kannur University, as the Chief Guest and resource person. Dr. Sreekanth delivered an enlightening speech, differentiating between innovation and discovery and providing a detailed explanation of the patent filing process. He also extended an opportunity for students to participate in research projects at Kannur University, inspiring and motivating them towards further innovation and entrepreneurship.

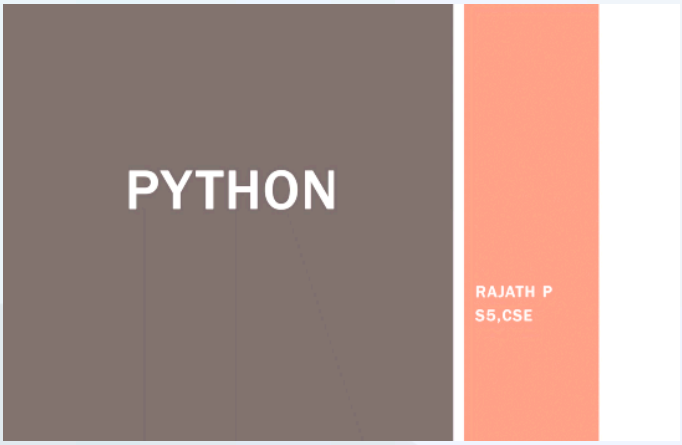
The program's agenda included a welcome speech by Ms. Dhanyaja N, a presidential address by Principal Dr. Shinu Mathew John, and an inaugural address and logo launching by Dr. N.S. Sreekanth. The event concluded with a vote of thanks by CSE Association Coordinator Ms. Saritha Narayanan. The "GEEKZONE" association aims to foster a spirit of innovation and entrepreneurship among CSE students and faculty.

TECHNO WEEK 2K22

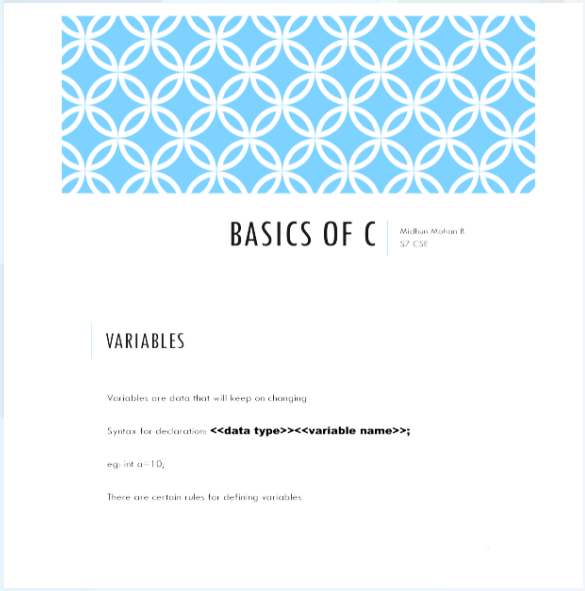
Techno Week 2k22, organized by the Coding Club STM under GeekZone (CSE Association), was a five-day virtual event held from 14th to 18th November 2022. Conducted via Google Meet, the sessions ran from 7:30 PM to 8:30 PM daily, offering an enriching experience to students across all semesters and departments. The event aimed to enhance participants' technical knowledge through interactive seminars on trending topics in computer science and engineering.

The event was coordinated by an efficient team of student leaders, including Arpit Ramesan, Midhun M B, Rajath P, Isha Sudhir (S5, CSE), Abhishek UK (S3, CSE), and Nasla Safiya (S3, CSE), under the guidance of staff coordinator Ms. Amitha I. With enthusiastic participation from students across multiple departments, Techno Week 2k22 served as an excellent platform for knowledge sharing and collaboration, reflecting the Coding Club's commitment to technical excellence.





Each day of the event was dedicated to a specific topic, beginning with "Basics of C" presented by Midhun M B (S7, CSE) on the first day, which focused on foundational programming concepts. The second day covered "Networking," delivered by Arpit Ramesan (S7, CSE), providing insights into communication protocols and network structures. On the third day, Arpit Ramesan continued with an engaging session on "Introduction to Cybersecurity," highlighting threats and mitigation strategies. The fourth day featured "Basics of Scripting," also presented by Arpit, emphasizing the utility of scripting languages in automation. The week concluded with "Basics of Python," delivered by Rajath P (S5, CSE), introducing Python's syntax and practical applications.



This successful event has set the stage for more such initiatives in the future, fostering an environment of continuous learning and innovation within the department of Computer Science and Engineering.

14 DAYS WEB DESIGN CHALLENGE

The "14 Days Web Design Challenge" was an immersive and interactive event designed to equip participants with essential web development skills. Organized by the Design Club STM under the GeekZone (CSE Association), the program targeted students from all departments and years, fostering a collaborative and inclusive learning environment. With a structured curriculum and a team of skilled resource persons, the challenge covered fundamental and advanced concepts in web design, ensuring participants gained both theoretical knowledge and practical experience.

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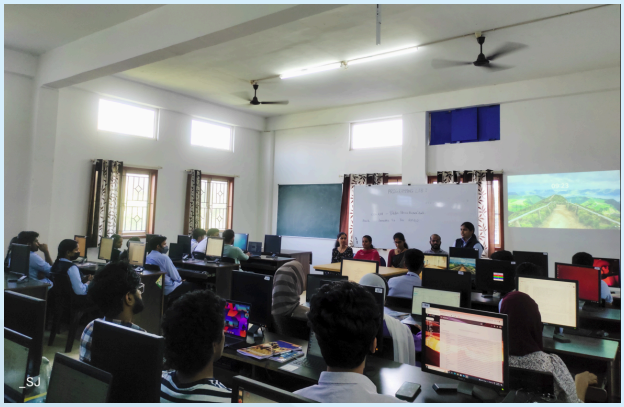
The workshop began with an introduction to LaTeX, covering fundamental commands and their practical applications. Participants learned how to effectively manage large documents with cross-references, tables, figures, and mathematical equations. Specific sessions included creating tables, inserting images, typesetting complex mathematical formulae, and automating content generation like tables of contents and bibliographies. These hands-on sessions ensured students gained the confidence to independently create professional documents using LaTeX.

WORKSHOP ON DEEP LEARNING

St. Thomas College of Engineering & Technology's CSE Department Association (GEEKZONE), in collaboration with CSI STM and IEDC STM, successfully hosted a hands-on workshop on "Deep Learning for Beginners" on February 24, 2023.The event drew 40 participants, including S4/S6/S8 CSE students and external candidates, for a day of immersive learning in the CSE Lab 1.



Resource experts Thushara B (Kannur University), Samasya MT (Kannur University), and Mr. Madhu K (STM) guided attendees through neural networks, CNN implementation with TensorFlow/Keras, and transfer learning applications in medical imaging. Participants gained practical experience using Google Colab and Python, with profits reinvested into future CSE initiatives. The workshop reinforced STM's commitment to cutting-edge technical education in AI.

CHRISTMAS 2K22

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