



TECH PULSE

VIDYA ACADEMY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

2024-2025

ISSUE : 7 VOLUME : 4



our vidya our pride

Vision

Progress through quality education and become a centre of excellence in computing knowledge

Mission

M1: Seek to foster in every student a profound and practical understanding of knowledge, encouraging critical inquiry and intellectual curiosity.

M2: Strive to ensure every student develops holistically, cultivating the skills, ethical character, and resilience necessary to thrive in diverse and challenging future environments.

M3: Scale the commitment to service by inspiring students to apply their knowledge and skills to actively address community needs, promoting ethical leadership and social responsibility.

Program Outcomes (POs)

PO-1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and Computer Science & Engineering specialization to the solution of complex engineering problems.

PO-2: 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.

PO-3: 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.

PO-4: 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.

PO-5: 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.

PO-6: 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.

PO-7: 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.

PO-8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO-9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary surroundings.

PO-10: 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.

PO-11: 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.

PO-12: 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.

Programs Specific Outcomes (PSOs)

PSO-1: The ability to apply the knowledge of computational structures and algorithms for solving complex engineering problems in multidisciplinary areas.

PSO-2: The ability to design, develop and evaluate computer based systems using advanced tools and technologies to meet the real world challenges.

Program Educational Objectives (PEOs)

PEO-1: Graduates shall practice Computer Science and Engineering in IT industry, public sector undertaking, as an entrepreneur or as a researcher pursuing a successful professional career.

PEO-2: Graduates shall demonstrate creativity, develop innovative ideas and work in teams to accomplish a common goal.

PEO-3: Graduates shall demonstrate project management skills, lifelong learning and social awareness upholding ethical values.

FROM THE HEAD'S DESK: ISSUE HIGHLIGHTS

Message From HOD



It is a matter of pride to share the latest edition of our department newsletter, highlighting the vibrant

academic and professional activities carried out during this period. Our department continuously endeavors to create a learner-centric environment that promotes innovation, critical thinking, and lifelong learning. By integrating emerging technologies, industry exposure, and research driven practices into the curriculum, we prepare our students to meet global challenges with confidence.

I sincerely congratulate our students and faculty for their achievements and thank all stakeholders for their continued support. Let us move forward together with commitment and enthusiasm toward excellence

About Department

The department was established in the year 2003 with the commencement of a B.Tech programme in CSE with an Intake of 240 students and the programme is affiliated to the APJ Abdul Kalam University, Trivandrum, Kerala. We strive to provide the holistic and inclusive ambience to embellish their knowledge and skills to achieve their long term goals.

ACADEMIC ACTIVITIES

FACULTY DEVELOPMENTS AND ACHIEVEMENTS

FDP ATTENDED

Ms Athullya Bhaskar (Asst Prof, CSE Dept) and Ms Jency Babu (Asst Prof, CSE Dept) successfully completed a five-day online Faculty Development Program (FDP) on “Powering Innovations and Efficiency on Intelligent Systems.” Organized by the Department of CSE at Mahaguru Institute of Technology, Kayamkulam, Kerala in collaboration with the Computer Society of India (CSI) during 10-18 July 2024.

Ms Thulasi Rajan K (Asst Prof, CSE Dept), Ms Mithu Varghese (Asst Prof, CSE Dept) and Ms Neethu C S (Asst Prof, CSE Dept) successfully completed a five-day online Faculty Development Program (FDP) on “Powering Innovations and Efficiency on Intelligent Systems.” Organized by the Department of CSE at Mahaguru Institute of Technology, Kayamkulam, Kerala in collaboration with the Computer Society of India (CSI) during 10-18 July 2024.

Ms Silpa K S (Asst Prof, CSE Dept) successfully completed a five-day online Faculty Development Program (FDP) on Artificial Intelligence and Robotics. The program was meticulously organized by the Department of Artificial Intelligence and Machine Learning at Mahaguru Institute of Technology, Kayamkulam, Kerala, in collaboration with Pencil Bitz. Held from July 15 to July 19, 2024.

Ms Remya K R (Asst Prof, CSE Dept), Ms Anitha L (Asst Prof, CSE Dept) and Ms Prajitha M V (Asst Prof, CSE Dept) successfully completed a five-day online Faculty Development Program (FDP) on “Powering Innovations and Efficiency on Intelligent Systems.” Organized by the Department of CSE at Mahaguru Institute of Technology, Kayamkulam, Kerala, in collaboration with the Computer Society of India (CSI) from July 10 to July 18, 2024.

Four dedicated faculty members **Ms Remya K R, Ms. Neethu C S, Ms Prajitha M V, and Ms Anitha L**, Assistant Professors in the Computer Science and Engineering Department—successfully completed a six-day online Faculty Development Program on “Advanced Techniques in AI and Machine Learning” organized by the College of Engineering Cherthala, Kerala, held from 06–11 January 2025, which provided an invaluable platform to explore advanced concepts in artificial intelligence, machine learning, data analytics, and their diverse applications across various domains.

NPTEL

Ms Ramya Raj K P (Asst Prof, CSE Dept) cleared NPTEL certification course on 'Introduction to Operating Systems' conducted by IIT Madras during July– September 2024.

Ms Neethu George (Asst Prof, CSE Dept) cleared NPTEL certification course on 'Cloud Computing' conducted by IIT Kharagpur during Jul – Oct 2024.

STAFF ACHIEVEMENTS

Mr E T Sivadasan (Asso Prof, CSE Dept) along with **Mr N Mohana Sundaram** and **Mr R Santhosh** published a paper "Stock market forecasting using deep learning with long short-term memory and gated recurrent unit " in the journal Springer , Soft Computing, 27 January, 2024.

Ms Jency Babu (Asst Prof, CSE Dept) published a paper "Malicious Source Detection and Threats Mitigation in Named Data Networking using Deep Learning" in International Journal of Intelligent Engineering and Systems (IJIES). 17(5), DOI: 10.22266/ijies2024.1031.34.

Ms Prajitha M V (Asst Prof, CSE Dept) successfully presented a technical paper "Detection of sleep apnea: A comprehensive analysis of advanced machine learning and deep learning approaches" in the IEEE sponsored International Conference on Advances in Computing and Communication 2024 (ICACC) held from 06-08 November 2024 at Rajagiri School of Engineering & Technology (Autonomous), Kochi, Kerala, India.

Ms Anitha L (Asst Prof, CSE Dept) successfully presented a technical paper "AI-driven diagnostics: Comparative analysis of machine learning and deep learning approaches in multiple sclerosis diagnostics" in the IEEE sponsored International Conference on Advances in Computing and Communication 2024 (ICACC) held from 06-08 November 2024 at Rajagiri School of Engineering & Technology (Autonomous), Kochi, Kerala, India.

Mr E T Sivadasan (Asso Prof, CSE Dept) along with **N Mohana Sundaram**, **R. Santhosh**, published a paper "Deep Learning for Energy Forecasting Using Gated Recurrent Units and Long Short-Term Memory" in the Journal of Intelligent Systems and Internet of Things,90-0-101, Doi: <https://doi.org/10.54216/JISIoT.140107> .

Dr Shameem S (Asso Prof, CSE Dept) and **Ms Neethu C S** (Asst Prof, CSE Dept) successfully attended AICTE sponsored 3-day seminar in the regional language (Malayalam) titled "Green Energy and Sustainability: Combating Global Warming" in the Emerging area Energy,Sustainability & Climate Change, under AICTE-VAANI scheme during 20-22 November 2024 in offline mode at Federal Institute of Science and Technology (FISAT), Angamaly.

STUDENT ACHIEVEMENTS

TOPPERS

S6 9.0+SGPA



Lakshmi Krishnan



Joel Joseph



Jidhin N S



Akash R

S4 9.0+SGPA



Aswathy E S



Teresa Benny



Nimisha Boban



Manasa



Aswin P Prakash



Lakshmi M S



Fathima Nasrin T N



Aysha Saleem M



Amith Krishna K



Arya T S



Vasisht Nirmal K V

S2 9.0+SGPA



Aiswarya Lakshmi
C J



Anuja Raj



Anasooya A G



Suha I A

PLACEMENTS



Appu K



Elvin Jimmy P



Dency P D



Shakeeb Rahman



Abhishek C



Adhul Sathish



Aiswarya J



Aswathy C B



Athira Mohanan



Athul N A



Charun Viswam C



Divya Devaraj



Elna Davis



Jidhin N S



Nida Shirin



Yadhukrishna P R

RESEARCH CONTRIBUTIONS

The paper, titled “IBLINK: Eye Blink Detection and Communication Using Morse Code,” presents a novel system that detects eye blinks and converts them into Morse code for communication. The research was conducted by students Sujishna V P (2020-24 Batch), Vrindha K N (2020-24 Batch), Sreechandhana K H (2020-24 Batch), and Uthara Sunil Kumar (2020-24 Batch), as part of their B.Tech project, under the guidance of Ms Mithu Varghese (Asst Prof, CSE Dept).

NPTEL

Annarose A Puthur (S5 CSE Dept) cleared NPTEL examination of the course ‘Essential Mathematics for Machine Learning’ conducted by IIT Roorkee.

Meenakshi M (S5, CSE Dept) and Sidharth Sethu (S5, CSE Dept) successfully cleared the NPTEL Examination of the course ‘ Fabrication Techniques for MEMs-Based Sensors: Clinical Perspective’.

Sreenandhana C Sivadasan (S5, CSE Dept), Nimisha Boban (S5 CSE Dept) and Swathi K Santhosh(S5 CSE Dept) successfully cleared the NPTEL Examination of the course ‘ Fabrication Techniques for MEMs-Based Sensors: Clinical Perspective ‘ .

Dept of CSE is sharing the news that, Arya T S (S5 CSE Dept) cleared NPTEL examination of the course ‘Essential Mathematics for Machine Learning’ conducted by IIT Roorkee.

Students from our Computer Science and Engineering department showcased exceptional technical expertise by winning top honors at the India Challenge 2024, organized by Red Hat Academy in collaboration with IPSR. Binil Babu (S5 CSE) secured the Second Prize, while Darwin T D (S5 CSE) achieved the Third Prize, bringing great pride to the department. The winners were honored in a ceremony at the Vidya IT Centre by Mr. G Mohanachandran (Director, Vidya IT Centre), Ms. Remya P C (HoD, CSE), and Mr. Jayakrishnan V (Technical Consultant, Red Hat).

CLUBS AND PROFESSIONAL SOCIETY ACTIVITIES

The newly founded Devlabs Club of Vidya Academy of Science and Technology conducted its first event, a 3-day bootcamp on web development. Led by Nikhil Mukundan (S7, CSE Dept), Sarath V S (S7, CSE Dept) and Saurav V S (S7, CSE Dept) the bootcamp took place online during 18-20 September 2024.



The FoSSers Club of Vidya Academy of Science and Technology conducted a two-day hands-on Wikimedia Workshop as part of Wiki Loves Onam on 12-13 October 2024, where around 20 students received practical training on Wikimedia Commons, HotCat Gadget, and OpenRefine from experts of the Wikimedians of Kerala User Group and Sahya Digital Conservation Foundation.



ASSOCIATION DAY

The CSE Department's Association Day on 27 February 2025 at Pranavam Auditorium was a grand success, featuring a traditional Rangapooja and insights from HOD Dr. Sunitha C. and Staff Coordinator Mr. Sivadasan E.T. Following the introduction of office bearers by Dr. Shameem and a motivating inaugural speech by Association President Mr. Abhishek C., Mr. Joel Joseph delivered an engaging technical talk on AI Agents. The event concluded with vibrant student dance performances, perfectly blending technical enrichment with cultural energy and department unity.



On March 26, 2025, the CSE Department celebrated "Merit Day" at Pranavam Auditorium to honor the 2024-2025 academic achievements. Inaugurated by alumna Ms. Deepasree Varma (ICT Academy of Kerala), the event featured a departmental milestone video, a technical talk, and a welcome address by HOD Dr. Sunitha C. Highlights included celebrating overall titles in the "Advika" festivals and honoring the executive council and student achievers for excellence in placements and sports.



TECHNICAL AND CULTURAL ACTIVITIES

CHRISTMAS

As part of the college-wide "Jingle Ball Bash" held on December 21, 2024, the Computer Science and Engineering (CSE) department hosted its own vibrant celebration titled "Chrismania," which featured music, dance, cake-cutting ceremonies, and fun games, all topped off by a special visit from Santa Claus to foster a sense of community among students and faculty.

ONAM

On September 12, 2024, the Computer Science and Engineering (CSE) Department celebrated Onam with its own distinctively titled program, "Olam" contributing to a college-wide celebration that showcased Kerala's rich cultural heritage through activities like Pookalams, feasts, and dances.

TECH FEST

VYVIDH 2024-25, held on 04-05 October 2024, featured innovative events including "DESTROY THE DECIBEL" organized by the CSE Department, bringing together students, professionals, and technology enthusiasts to showcase creativity, research, and advancements in science and technology.



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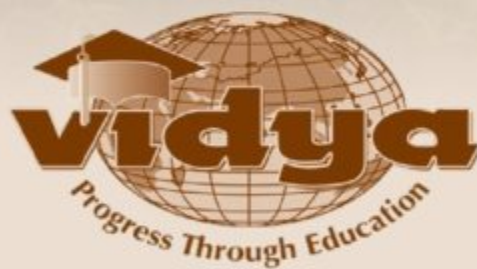


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