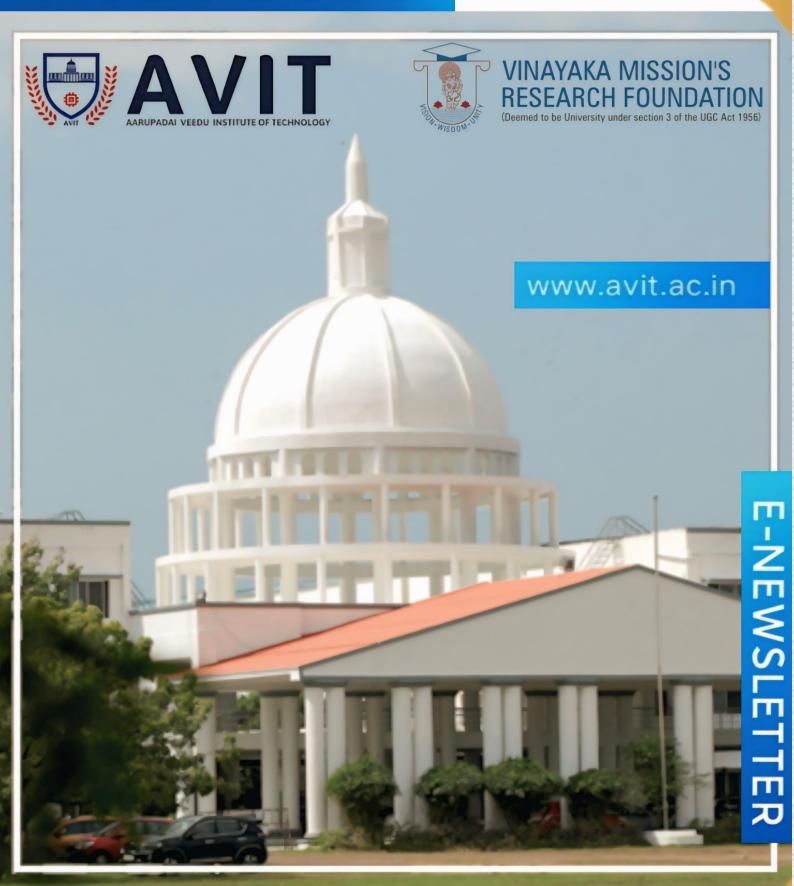
INSIGHT

November 2025 | Volume 1 | Issue 7



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



Achievements Summary - November 2025

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Department Events

The CSE Department organizes FDPs, workshops, and industrial visits to promote continuous learning and industry engagement. These events enhance faculty expertise and student skills in emerging technologies. Such initiatives help to produce industry-ready graduates equipped for innovation in a dynamic tech landscape.

Workshop

CII EduTech Conference 2025 - "Learning Without Boundaries"

Dr. S. Balakrishnan, Professor & Head, and Dr. S. Pitchumani Angayarkanni, Professor, Department of Computer Science and Engineering, represented Aarupadai Veedu Institute of Technology (AVIT) at the **CII Tamil Nadu EduTech Conference 2025** held on 28th November 2025 at ITC Grand Chola, Chennai. Organised by the Confederation of Indian Industry (CII) Tamil Nadu Education Panel, the conference was inaugurated by Dr. Govi Chezhiaan, Hon'ble Minister for Higher Education, Government of Tamil Nadu, and brought together academic leaders, EdTech innovators, and global experts under the theme "Learning Without Boundaries." The sessions highlighted the transformation of education through AI, analytics, and sustainable digital ecosystems, with special focus on SDG 4 – Quality Education for All.



XR Symposium for Global South November 28, 2025 at IIT Madras

The XR Symposium for Global South was held on 28 November 2025 at IIT Madras, bringing together global experts and industry leaders to discuss scalable XR innovations for the Global South. Keynotes from Qualcomm, Meta, Ericsson, Samsung R&D, Accenture, Dolby, and others highlighted advances in spatial computing, XR for 6G, immersive intelligence, and their applications in education, healthcare, and entertainment. Dr. M. Muthukumaran, Professor and students Ms. Archana Shakya, Mr. Sanskar Kumar, and Mr. Adarsh Kumar Keshri participated in the event, gaining valuable insights into emerging XR technologies and interacting with experts like Prof. Steven LaValle and Dr. Prince Gupta.







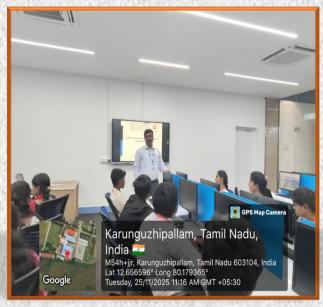




3 Days Workshop on AI and 4.0 Tools for Innovators and Entrepreneurs November 25-27,2025 at AVIT.

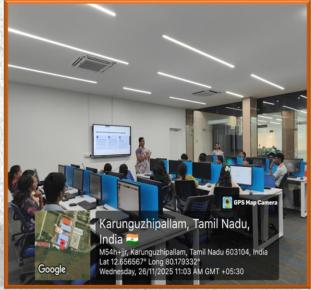
A three-day workshop on "AI and 4.0 Tools for Innovators and Entrepreneurs" The workshop equipped B.E. students with essential skills in emerging technologies, innovation, and entrepreneurship. Expert sessions covered AI fundamentals, Industry 4.0 concepts, and various AI-powered tools for research, design, and productivity. Hands-on activities and design-thinking practices enabled participants to develop user-centered ideas, create AI-assisted pitch presentations, and explore real-world applications. With 56 students attending, the workshop fostered creativity, strengthened problem-solving abilities, and promoted an innovation-driven mindset aligned with the Institution's Innovation Council goals.











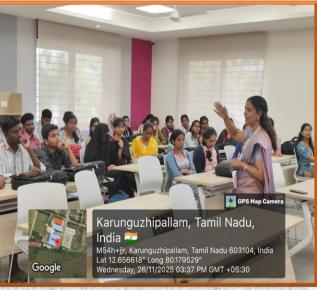




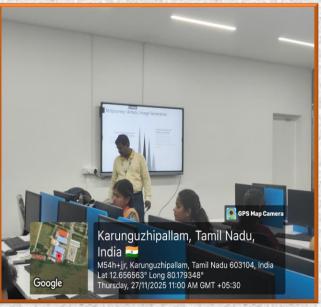












Security Leadership Summit November 15-16, 2025

IITM Research Park

The Security Leadership Summit 2025, held on 15–16 November at IITM Research Park, Chennai, brought together industry leaders to discuss the evolving private security landscape. The keynote insights highlighted expanding career opportunities, the growing demand for professional security services, and the crucial role of security personnel in national safety. A team of 15 students and 4 faculty members from our institution actively participated, gaining valuable exposure through panel discussions, including the technical session "Guardians of Guard," which covered IoT, Cybersecurity, Drone Technology, and skill development for security professionals.

The summit offered an enriching platform for our students to understand real-world applications of emerging technologies in the security industry. Their interaction with senior leaders and experts provided meaningful exposure to industry expectations, future trends, and skill development opportunities.









Department Events & Community Engagement Men's Day Celebration at Department of CSE

The CSE Department celebrated International Men's Day on November 19, 2025 by appreciating the contributions, dedication, and hard work of the male faculty members. A simple yet thoughtful gathering was organized, where colleagues shared warm wishes and acknowledged their positive impact on the department. The event created a pleasant and encouraging atmosphere, promoting respect, teamwork, and mutual support among the faculty.







Student Achievements
in Co-Curricular Activities
(Placement/ Internship/
Hackathon/ Certificate of
Excellence)

Department of Computer Engineering students demonstrated outstanding skills and enthusiasm across a range of co-curricular activities, achieving notable success in various forums. These accomplishments reflect their dedication, creativity, and the dynamic spirit of our student community, making us proud ambassadors of holistic education.

Awards Received

The Silver Spark Ideathon 2025 was successfully held at AVIT on November 28, 2025 as part of the VMRF-DU Silver Jubilee celebrations. The event was evaluated by industry experts Mr. J. Vijayaraghavan (HCLTech) and Mr. J. Subramanian (KIYA AI). The valedictory address was delivered by Shri Saravanan Sundaramoorthy, Innovator, Angel Investor, and TiE Charter Member, who also announced the results. Our students proudly secured the Consolation Award in the Ideathon.

Mr. Nayan

Mr. Vanshika Naga

Mr. Divyansh Bharati

Congratulations to their Mentor: Dr. M. Rajesh, Associate Professor.



Internships

Mr. Manjit Kumar, has secured a dream internship with Pragyashal Cloud Solutions as a Business Development Executive, with a monthly stipend of ₹20,000.





Mr.Palamkar Neeraj Kumar, has successfully completed his Python Developer internship at Blue Silicon Infotech Pvt. Ltd., Chennai, from 25 August to 27 October 2025. He contributed to Python coding, debugging, back-end logic, and API integration, showing strong problem-solving skills and enthusiasm for learning new technologies.

Ms. Jayasri, successfully completed her internship as a Python Full Stack Developer at Soft Nexis Technology from 08 September 2025 to 08 November 2025. During the internship, she demonstrated strong technical skills, dedication, professionalism, and a commendable commitment to learning and contributing to real-time projects.





Mr.Rahul Kumar, successfully completed his Artificial Intelligence Internship at iStudio from 25th August to 29th October 2025. His dedication and performance were highly appreciated by the internship mentor.

Mr. Shashi Ranjan Kumar, has successfully completed his Cyber Security internship with Placemantra, supported by MSME and AICTE, from September 1st, 2025 to November 1st, 2025. During the internship, he demonstrated commendable performance and showed sincerity and diligence in all assigned tasks.



Hackathons

Two student teams (Ms. Sugunasree K – II CSE (AIML), Mr. Syed Yaseen – II CSE, Ms. Rathnamala P – II CSE, Mr. Navadeep – II CSE (Cybersecurity), Mr. Afrid – II CSE



(Cybersecurity) from AVIT-CSE showcased outstanding innovation and technical excellence at MINT-athon 2025, organized by the PALS team in collaboration with MInT (Mobility and Intelligent Transportation initiative, IIT Madras) on 8–9 October 2025, secured a position among the Top 16 teams for their project titled 'Smart Mobility & Transportation using Cutting-Edge Technology." Mentors: Dr. S. Balakrishnan, Professor and Head, & Mr. B. S. Seshadri (PoP-CSE).

The AVIT CSE Team has been shortlisted for the 30-hour offline Cardano Hackathon Asia - IBW Edition 2025, powered by Hack2Skill. Among numerous submissions across Asia, our team secured place in the Top 112. The final round will be held in Bangalore on 29-30 November 2025. Students Mr. Navan, Mr.Divyansh, and Ms. Vanshika will represent AVIT, guided by Dr. S. Balakrishnan and Mr. B. S. Seshadri. We congratulate the team and wish them success in the finals.



Certificates of Excellence

Students successfully completed various online certification courses, demonstrating their initiative and commitment to continuous learning. These achievements highlight their dedication to enhancing technical skills beyond the classroom.

Mr. Rajesh Kumar, participated in a webinar organized by GUVI, in collaboration with HCL, on "How to Build Full Stack Skills That Crack Product-Based Companies" held on 2nd November 2025.





Mr. Rajesh Kumar has successfully completed an online course on "Machine Learning Using Python" offered by Simplilearn SkillUp on 1st November 2025.

Mr. Rajesh Kumar participated in a webinar organized by GUVI in collaboration with HCL on "How to Become a Software Developer at Top Product-Based Companies", held on 31st October 2025.





Mr. Rajesh Kumar, successfully completed the AI Tools and ChatGPT Workshop conducted by be10x on November 2nd, 2025. The certification, verified by be10x, highlights his training in effectively using AI to enhance productivity and solve real-world problems.

Faculty Achievements

Faculty Achievements

Our faculty members consistently demonstrate excellence by earning honors and awards at national and international platforms. Their impactful contributions to research and knowledge advancement have received widespread recognition. These accomplishments reflect both their expertise and our institution's strong commitment to academic excellence and innovation.

Awards Received

Dr. S. Balakrishnan, Professor and Head, received the *Distinguished Contribution to Computer Science* and Engineering Award at the 9th Higher Education Innovation & Technology Summit & Awards 2025, held on 1st November 2025 in Bengaluru, organized by Plus Nineone Media.





Dr. S. Balakrishnan, Professor and Head, has been honored with the Bharat Education Excellence Award 2025 – Bhisma Acharya Award (BEEA) for his exemplary contributions to research and education. Presented by Brain O Vision, the award recognizes his outstanding academic commitment and impactful achievements.

Resource Person

Dr. S. Balakrishnan, Professor and Head, served as a **Distinguished Speaker** at the International Conference 2025 (Virtual) on SDG Agenda 2030, held on 15th November 2025, themed "Building a World of Peace Amid Global Challenges." He delivered a talk titled "Sustainable Intelligence: Aligning AI with UN SDG Frameworks for Peace and Inclusion," focusing on how next-generation AI systems can advance peace-building, promote inclusive development, accelerate progress toward the UN SDGs in an era of complex global challenges.





Dr. S. Balakrishnan, Professor and Head, served as a Doctoral Committee (DC) member at AMET University, Chennai, for the first DC meeting on 21st November 2025. The session provided a productive platform to review the scholar's progress and offer constructive research guidance.

Dr. S. Balakrishnan, Professor & Head, received the Certificate of Excellence from the Global Scientific Guild for his outstanding keynote presentation titled "Al-Powered Digital Twins: Transforming Engineering Design & Predictive Maintenance" at the 14th Global Webinar on Applied Science, Engineering and Technology held on November 25–26, 2025.



Dr. R. Jaichandran, Professor and Deputy
Director (Research), VMRF-DU, delivered a session
on enhancing research quality, publication
strategies, and effective use of the Scopus database.
The program, part of the GURU-DAKSHTA Faculty
Induction Program (2025–2026), helped
faculty understand research metrics and
indexing standards. The session was held
on 15th November 2025.





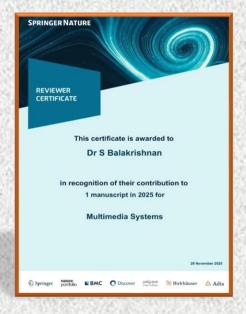
Dr. N. Sarika, Professor, was invited as a **Resource Person** at New College, Chennai, where she delivered an engaging session on "Career Goals and Motivation." The session focused on guiding students to identify their career aspirations and stay motivated to achieve their professional objectives.

Journal and Conference Reviews



Dr. S. Balakrishnan, Professor and Head, has been honoured with a Certificate of Appreciation by Lunar Publications for his exemplary contribution as a **Jury Member** at the International Conference on Multidisciplinary Sciences and Technologies (ICMST'25), held on 14th & 15th November 2025.

Dr. S. Balakrishnan, Professor and Head, received a Reviewer Certificate from Springer Nature for his contribution to reviewing a manuscript for the journal *Multimedia Systems* in 2025.

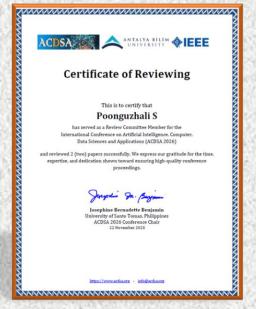




Dr.M. Rajesh, Professor, has been honored with a Certificate of Appreciation by Lunar Publications for his exemplary contribution as a Jury Member at the International Conference on Multidisciplinary Sciences and Technologies (ICMST'25), held on 14th & 15th November 2025.

Dr. Muthukumaran Malarvel, Professor has been recognized for his contribution as a Review Committee Member for the International Conference on Artificial Intelligence, Computer, Data Sciences and Applications (ACDSA 2026), organized by Antalya Bilim University in collaboration with IEEE.





Dr.S. Poonguzhali, Professor, has been recognized for his contribution as a Review Committee Member for the International Conference on Artificial Intelligence, Computer, Data Sciences and Applications (ACDSA 2026), organized by Antalya Bilim University in collaboration with IEEE.

Publications

Dr. S. Balakrishnan, Professor and Head, published his research paper titled: "Federated Learning and Digital Twin-Enabled Predictive Security Architectures with Standardized Policy Enforcement for Zero-Touch 6G Networks" in the journal IEEE Communications Standards Magazine — a Q1-ranked, Scopus and SCI indexed journal with an impressive Cite Score of 16.2.





Dr. R.Viswanathan, Associate Professor, has co-authored a research paper titled "Siamese DenseNet for Interpretable Alzheimer's Disease Detection using MRI with XAI", published in Computers and Electrical Engineering (Elsevier, 2026). The study introduces an advanced deeplearning model that enhances diagnostic interpretability for Alzheimer's detection.

Dr. S. Balakrishnan, Professor and Head, Kumar RM Sunil, Mr. S. Simonthomas, Assistant Professor, Published book chapter titled on "Challenges and Future Directions", Edited by Basu Mallik, B., Mukherjee, G., Kar, R., & Fan, Y. (Eds.). (2025). Engineering the Circular Economy: Leveraging Fuzzy Logic for Implementation (1st ed.). CRC Press.



https://doi.org/10.1201/9781003538837



Mr. M. Rajesh, Associate Professor, has published his research article titled "Reinforcement Learning-driven Handover Management for Efficient Trajectory Prediction in Hybrid LiFi-WiFi Networks" in the Springer journal Wireless Personal Communications (Published online: 03 November 2025).

Paper presentations



Muthukumaran, Professor, Dr. presented his research paper titled **EXPLAINABLE QUANTUM MACHINE** LEARNING THROUGH INTERPRETATION OF CIRCUIT OUTCOMES VARIATIONAL CLASSIFICATION TASKS" the IEEE international conference on innovations in engineering and next-generation technologies for sustainability (ICINVENTS-25) conducted by sri krishna college of engineering and technology, Coimbatore on 7-8 November 2025

R.Viswanathan , Associate Professor, presented a research paper titled "Detecting Fetal **Brain Abnormalities from Ultrasound Images** by Deep Learning Methods" at the International Conference on Innovative Data Communication Technologies and Application (ICIDCA-2025). The work introduces advanced deep-learning techniques for early and accurate detection of fetal brain abnormalities using ultrasound imaging, potential significant demonstrating improve neonatal healthcare outcomes.

Proceedings of the 7th International Conference on Innovative Data Communication Technologies and Application (ICIDCA-2025) DVD Part Number CFP25CR3-DVD-15BN 979-8-3315-1413-6 Detecting Fetal Brain Abnormalities from Ultrasound Images by Deep Learning Methods Viswanathan R tent of Computer Science and Department of BBA Department of Computer Science Engineering. Aarupada: Vedu Institute of Technology, Davananda Sagar College of Arts, Science Vellore Institute of Technology. and Comm Vellore, India. Chennai, India. iswanathan aves0119@avit ac in Bangalore, India eddy sagili@gmail.com m-boom@davanandasagar.edi Mudamm Smeel Chaliki Archana ⁴Keerthana N V Department of Electronics and Department of Information Technology, Department of Information Technology Velalar College of Engineering and Technology, Communication Engineering Adatva University Aditya University, Andhra Pradesh, India Andhra Pradesh India Erode, India smeel007@gmail.com nvkeerthu@gmail.com Abstract—The earliest and most accurate outcome of fetal brain abnormality can lead to timely medical intervention and the successful in locating the ultrasound image structural feature substantial improvement of neonatal outcomes. A method using with greater precision and speed when compared to deep learning to automatically analyze ultrasound images for conventional methods [5]. These models can develop finding structural defects in the fetal brain. The system fuses multiple neural network models to grasp spatial and contextual information, which is most likely to be relevant to 2D hierarchical representations straight from raw images, thus reducing the need for manually engineered feature extraction and enabling strong performance even in disturbed or lowultrasonography. A series of well-thought-through image processing methods enables the input data to be of high quality and consistent, which in turn allows the deep models to learn better. It has been also added a new classification layer to their quality images [6]. In the implementation of deep learning nethods in fetal brain ultras ound imaging, a lot can be achieved; for instance, it can overcome the current problem of diagnosis by offering objective, reproducible, and speedy evaluation tools [7]. Additionally, combining AI architectures can broaden the score of chances featured in network, which enables the system to achieve an accuracy of

96.3% and also learns to recognize normal and abnormal patterns depending on the very small shape differences that



Dr.R.Viswanathan, Associated Professor, presented a research paper titled "Detecting Fetal Brain Abnormalities from Ultrasound Images by Deep Learning Methods" at the 7th International Conference on Innovative Data Communication Technologies and Application (ICIDCA 2025). The conference was organized by RVS College of Engineering and Technology, Coimbatore, India, and held from 6–8 October 2025.

Certificates of Excellence



Dr. S. Pitchumani Angayarkanni,
Professor, participated in a four-day
residential Leadership
Development Program for Women
in Higher Education Institutions
held from 11-14, November 2025 at
the Indira Gandhi Institute of
Development Research (IGIDR),
Mumbai. Organized by IGIDR, Mumbai

in collaboration with the Association of Indian Universities (AIU) and partner HEIs, the program focused on empowering women leaders in academia through sessions on strategic leadership, institutional governance, policy implementation, emotional intelligence, and inclusive decision-making.

Dr.S.Poonguzhali, Professor, has successfully completed the NPTEL course on "**Learning Analytics Tools**" with Elite from July-Oct 2025.





Dr.S.Poonguzhali, Professor, has successfully completed the NPTEL FDP on "**Learning Analytics Tools**" with Elite from July-Oct 2025.

Dr.S.Poonguzhali, Professor, has successfully completed the FDP on "Emerging Trends & Challenges in Cyber Security"
Organised by Guru Nanak Institute of Technology from 10th Nov to 15th Nov 2025.





Dr.S.Poonguzhali, Professor, has successfully completed the NPTEL course on **Introduction to Machine Learning** with Elite from July-Oct 2025.

Dr.S.Poonguzhali, Professor, has successfully completed the NPTEL FDP on **Introduction to**Machine Learning from July-Oct 2025





Dr.S.Poonguzhali, Professor, successfully completed Six-Days Online Faculty Development Programme on Design Thinking and Innovation. The FDP was organized by Sant Gajanan Maharaj College of Engineering and conducted from 17th November 2025 to 22nd November 2025.

Dr. N. Sarika, Associate Professor, successfully completed the AICTE Training and Learning (ATAL) Academy's Six-Days Online Faculty Development Programme on Design Thinking and Innovation. The FDP was organized by Sant Gajanan Maharaj College of Engineering and conducted from 17th November 2025 to 22nd November 2025.





Dr.R.Viswanathan, Associate Professor, successfully participated in the Five Days Faculty Development Programme on "Data Science." The FDP was organized by the Department of Information Technology, MEA Engineering College, Perinthalmanna, Kerala, in association with Pencilbitz International, and was conducted from 1-5, November 2025.

Ms.D.Gayathri, Associate Professor, has successfully participated five days FDP on "DATA SCIENCE" organized by Department of IT,MEA Engineering College Kerala, Associated with pencilbitz International, and was conducted from 1-5, November 2025.





Ms.D.Gayathri, Associate Professor, has successfully completed the NPTEL course on "Responsible & Safe AI Systems" July to October 2025(12 week course).

Mr.T.Deenadayalan, Associate Professor, has successfully participated five days FDP on "DATA SCIENCE" organized by Department of IT,MEA Engineering College Kerala, Associated with pencilbitz Interanational, and was conducted from 1-5, November 2025.





Mr. Kishore Kuppuswamy, Professor of Practice, has successfully completed the Software Engineering course offered by Infosys on 13th November 2025.

Mr. Kishore Kuppuswamy, Professor of Practice, has successfully completed the course "Essentials of Cloud Computing" on 21st November 2025, earning certification through the Wingspan learning platform. This accomplishment reflects his commitment to advancing technical skills in modern cloud technologies.





Mr. Kishore Kuppuswamy, Professor of Practice, successfully completing the certification course "Software Engineering and Agile Software Development" on November 18, 2025.

Mr. Kishore Kuppuswamy, Professor of Practice, successfully completing the certification course "Introduction to Cloud Computing" on November 19, 2025.





Mr. Kishore Kuppuswamy, Professor of Practice, has successfully completed the AWS Certified Solutions Architect – Associate certification on November 26, 2025. This globally recognized credential demonstrates his strong expertise in designing secure, scalable, and reliable cloud solutions on the AWS platform.

Mrs. P. Thara, Assistant Professor, has successfully completed Google's Gemini Academy 2025, organized in collaboration with the Learning Links Foundation.





Mrs. P. Thara, Assistant Professor, has successfully completed the NPTEL course "Operating System Fundamentals" (July-October 2025) with commendable performance. The course, over 12 weeks, provided in-depth knowledge of core operating system concepts.

Mrs. P. Thara, Assistant Professor, has successfully completed the NPTEL course "Practical Cyber Security for Cyber Security Practitioners" (July-October 2025). This 12-week, course provided hands-on exposure to essential cybersecurity concepts and practices.





Ms. V. Kaviya, Lab Assistant, has successfully completed the NPTEL course "Cloud Computing" (July-October 2025). This 12-week, course offered comprehensive insights into cloud architectures, services, and deployment models.

"Computers are good at following instructions, but not at reading your mind." – Donald Knuth