



DAYANANDA SAGAR
UNIVERSITY



SCHOOL OF
ENGINEERING

SOE - "The Weekly Buzz"

The Official Weekly Newsletter of **School of Engineering**



Week#51 (16 to 21 Dec, 2024)

www.dsu.edu.in

SCHOOL OF ENGINEERING

VISION

- Transform lives through excellence in engineering education, research and innovation with an emphasis on sustainability, inclusive technologies and global needs.

MISSION

- Design and deliver contemporary engineering curricula to address regional and global needs while emphasizing ethics, values, integrity and regional relevance.
- Carryout high impact academic research, industry projects and innovation activities with active student engagement to advance science and engineering knowledge and state-of-the art industry practices.
- Develop regional and national leaders to advance the society and economy.

Faculty Contributions

Department Of Computer Science & Engineering

- Dr. Renukadevi M N and Prof. Kavyashree I Pattan, Assistant Professor, Department of CSE, attended and presented a paper titled "Comparative Analysis of Machine Learning Algorithms for Water Region Classification in Flood-Affected Images" in the 6th International Conference on Machine Learning, Image Processing, Network Security and Data Science (MIND 2024) at NIT, GOA, on 21st December 2024.



- Dr. Renukadevi M N, Assistant Professor, Department of CSE, has contributed as a session chair for Track 4 on the Network Security domain in the 6th International Conference on Machine Learning, Image Processing, Network Security and Data Science (MIND 2024) at NIT, GOA, on 21st December 2024.



Department Of CSE (Data Science)

- Dr. Shaila S G, Professor & Chairperson and Prof. Sindhu A, Assistant Professor has successfully participated & completed AICTE Training and Learning (ATAL) Academy Faculty Development Program on Artificial Intelligence in Data Science Applications at MUFFAKHAM JAH COLLEGE OF ENGINEERING AND TECHNOLOGY from 13/12/2024 to 19/12/2024.



- Prof. Monish L, Assistant Professor has successfully completing a free online course Python Project for Beginners provided by Great Learning Academy on December 2024.



Department Of CSE (Cyber Security)

- Dr.Mubeen Ahmed Khan has successfully completed the Module: Content Ownership from Researcher Academy on 19.12.2024.



Department of Electronics and Communication Engineering

- M Lorate Shiny successfully presented their paper, “Design and Development of Pulse Rate Monitoring System Powered by STM32 Microcontroller,” at the 5th International Conference on IoT-Based Control Networks and Intelligent Systems (ICICNIS 2024). The conference was held on 17th-18th December 2024 at T. John Institute of Technology, Bengaluru, and focused on advancements in IoT and intelligent systems. Congratulations to M Lorate Shiny for this excellent contribution to cutting-edge research.



- Mr. Nadeem Pasha, Assistant Professor, Department of Electronics and Communication Engineering at Dayananda Sagar University, has successfully completed the AICTE ATAL Faculty Development Program on Crystal Growth, Semiconductor Processing, and Manufacturing Technologies held at the prestigious Indian Institute of Technology (Indian School of Mines), Dhanbad from 16th to 21st December 2024. Congratulations to Mr. Nadeem Pasha on this significant professional accomplishment.



- Dr. Arun Balodi, Chairperson and Professor, Department of Electronics and Communication Engineering, SOE at DSU Bangalore, successfully participated in the AICTE Training and Learning (ATAL) Academy Faculty Development Program titled “Pioneering the Future of Healthcare: Robotics, Deep Learning, and Emerging Technologies.” The FDP covered cutting-edge advancements and applications in robotics, artificial intelligence, and healthcare technologies, providing valuable insights for academic and research pursuits. The event underscores DSU's commitment to fostering continuous learning and technological excellence among its faculty.



Department of CSE (AIML)

- Dr. Mude Nagarjuna Naik, Assistant Professor, Dept. of CSE (AI&ML) has awarded the certificate for presentation of paper titled “IMPACT OF ARTIFICIAL INTELLIGENCE ON THE DEVELOPMENT OF EMPLOYMENT AND THE LABOR MARKET” at IEEE International Conference on Augmented Reality, Intelligent Systems, and Industrial Automation (ARIIA-2024) 20-21, December, 2024 Manipal Institute of Technology, Manipal Academy Of Higher Education, Manipal, India.

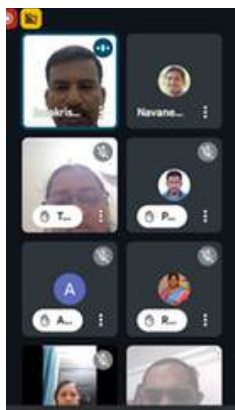


- Dr. Lakshmanan, Assistant Professor, Dept. of CSE (AI&ML) has awarded the certificate for successfully presented the paper entitled Leveraging Blockchain for Secure and Efficient Crowdfunding: An Optimized Particle Swarm Approach at 9th International Conference on Communication and Electronics Systems (ICES 2024) organized by PPG Institute of Technology, Coimbatore, India on 16-18, December 2024.



Department of Humanities

- Dr. Seema Tharannum, Professor of Biological Sciences at DSU have successfully participated & completed AICTE Training & Learning (ATAL) Academy Faculty Development Program on Renewable Energy and Electric Vehicles Technology for Sustainable Future at J.J. COLLEGE OF ENGINEERING AND TECHNOLOGY from 16 to 21st Dec 2024.



Departmental Activities

Department of Electronics and Communication Engineering

- The Department of Electronics and Communication Engineering proudly inaugurated the IEEE Council on Electronic Design Automation (CEDA) Student Branch Chapter at Dayananda Sagar University (DSU). This significant event marked the start of a journey dedicated to innovation and excellence in Electronic Design Automation (EDA).
- The ceremony featured distinguished guests, including Dr. Parameshachari B D, Dr. Shashidhara K S, Dr. Pushpa Mala S, and Dr. Arun Balodi, who shared valuable insights into EDA trends and opportunities. Under the leadership of Dr. Arun Balodi, Chairperson of ECE, and Deekshitha R, Chair of the chapter, a talented team was introduced; Vice Chair: Laranya Subudhi, Secretary: Prokshith J S, Treasurer: Mohammed Furkhan, Membership Chair: Preesha Tandon. The event showcased student enthusiasm through active participation, discussions, and an introduction to the chapter's vision. The chapter aims to foster academic and professional growth by organizing technical talks, workshops, and competitions. Heartfelt thanks to the faculty, students, and volunteers for making the event a grand success. Exciting activities and achievements lie ahead!



- Dr. B. M. Ashwin Desai (Associate Professor), Rakshith Prajwal R. S. (ENG21EC0093) and Sameer A. Nadaf (ENG21EC0102) from the Department of Electronics and Communication Engineering attended the IEEE 18th International Conference on Industrial and Information Systems (ICIIS 2024) held at IIT Madras from December 21st to 23rd, 2024.
- The conference covered a wide range of topics, including Power, Energy, and High Voltage Engineering; Signal and Image Processing; Control, Robotics, and Automation; Communication and Information Technology; and Electronics, Instrumentation, and Biomedical Engineering, providing valuable insights into advancements in engineering for sustainable growth.
- The group presented the paper titled “Development of Novel Electro spun Nanofibers using *Abelmoschus esculentus* (Okra) Mucilage and PVA for Potential Biomedical Applications”. This paper highlighted on how Okra mucilage and PVA based Nano fibers were fabricated for the first time using the process of electro spinning and the characterization tests performed to evaluate the structural and bio active properties of the Nano fibers produced. Thus, laying the foundation for various applications of Okra mucilage based Nano fiber.
- As part of the conference, a workshop titled “Programming with Quantum Computers” was conducted by Jagan Narayan Natarajan, Dr. Kalyan Dasgupta, and Janani A. from the IBM Quantum team. The session introduced fundamental quantum computing concepts such as the Interference Effect, Superposition and Entanglement, Quantum Bits (Qubits) versus Classical Bits, Dirac (Bra-Ket) Notation, Quantum States, Qubit Representation, and the CNOT Gate. Additionally, participants had the opportunity to engage in hands-on quantum programming using Qiskit, providing a practical understanding of these advanced topics.



Department of Computer Science and Technology

- The Department of Computer Science and Technology recently organized a highly successful event titled "Mastering Machine Learning: A Comprehensive Hands-On Bootcamp" from 12th to 16th December 2024 for 5th semester students. Led by Mr. Dinesh Yuvaraj, an AI Developer renowned for his expertise in fine-tuning language models and developing AI chatbots, the bootcamp provided participants with a robust foundation in machine learning and artificial intelligence. The program blended theoretical knowledge with practical applications, covering topics such as building language models, chatbots, neural networks, boosting algorithms, and the Random Forest method. The hands-on training sessions allowed students to implement these techniques and understand their real-world applications. The bootcamp concluded with participants feeling confident and equipped with the skills to apply machine learning in practical scenarios, laying a strong foundation for further exploration or career advancement in AI and data science.



Department of Aerospace Engineering

- On 19th December 2024 the Alatus Aerospace Club, under the Department of Aerospace Engineering at DSU organized an engaging and educational interactive session on health and hygiene for the students of the government school in Kiranagere, Harohalli. The event featured fun activities, including interactive "germ finder" games designed to teach students the importance of hygiene in a playful way, along with hands-on activities to promote better health practices. Additionally, students enjoyed a paper plane-making activity, combining creativity and learning. The session aimed to foster awareness and inspire healthy habits, while also encouraging curiosity and teamwork among the students.



- The "Connect Next - 3D Experience Workshop," organized by Dassault Systèmes from December 19th to 21st, 2023, at their PRAMUKH office, provided an exceptional platform for students to enhance their skills and gain hands-on experience with advanced 3D design and engineering tools. Over three days, participants delved into topics such as rocket functioning, mechanical design, propulsion systems, avionics, and CANSAT systems. The workshop commenced with a session on design thinking, followed by an introduction to rocket principles, and progressed to specialized sessions on structural and motor design, avionics systems, and practical applications. On the final day, students presented their Preliminary Design Review (PDR) of rockets and CANSATs, receiving expert feedback to refine their designs. Led by Mr. Sunny Kabrawala, Founder and Director of Space Technology & Aeronautical Rocketry, the workshop was highly interactive, blending theoretical insights with practical learning. The event concluded with students gaining enhanced knowledge, practical skills, and invaluable feedback, making it a resounding success. Special thanks were extended to Dassault Systèmes and Mr. Kabrawala for their mentorship and support.



Student Activities

Department of Computer Science & Engineering

- Mr. Prajwal B R (ENG22CS0121) , Mr. Navtej S (ENG22CS0109), Mr. Nithin P Hegde (ENG22CS0113), Mr. Pavankumar P S (ENG22CS0117) and Mr. Pratham U K (ENG22CS0123), 5th semester CSE Students, under the guidance of Prof. Mala B A, Assistant Professor presented a paper titled “Smart Cradle: A Secured Assistance and Monitoring system for baby using IoT” in the IEEE 5th International Conference on IoT Based Control Networks and Intelligent Systems (ICICNIS 2024) organized by T. John Institute of Technology, Bengaluru, Karnataka on 17th December 2024.



- Mr. Jayesh Ranjan (ENG23CS0326), 3rd semester CSE Student and Student President, E-CELL, wins A Notable Innovation Award of ₹40,000 cash prize at INNOTECH IDEATHON 2024, held by DERBI Foundation & SINE IIT Bombay on Dec 20-21, 2024.



Department Of CSE (Cyber Security)

- Dr. Durbadal Chattaraj, along with students from the 5th and 7th semesters, participated in the 31st IEEE International Conference on High-Performance Computing, Data, and Analytics. The four-day event, held from 18th to 21st December 2024, provided an excellent platform for exploring advancements in high-performance computing and data analytics. Notably, Mr. Bansidhara Maji (ENG22CY0006) and Srihari K B (ENG21CY0043) accompanied Dr. Durbadal Chattaraj to the conference, representing the department and engaging in insightful sessions and discussions. This participation reflects the department's commitment to fostering research and innovation among students and faculty.





**SCHOOL OF
ENGINEERING**

**Edited by :
Office of Dean SOE,
Dayananda Sagar University
Deverakaggalahalli, Kanakapura Road Ramanagara Dt.,
Karnataka - 562 112**