



DAYANANDA SAGAR
UNIVERSITY



SCHOOL OF
ENGINEERING

SOE - "The Weekly Buzz"

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



Week#13 (March 24 to 29th, 2025)

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 Aerospace Engineering

Dr. Srinath R & Prof. Kartik S. Tandel from the Department of Aerospace Engineering, Dayananda Sagar University, has co-authored a research paper titled "Optimizing Pressure Recovery in Mixed Compression Inlets for High-Speed Ramjet Applications," published in Physics of Fluids (March 2025 issue). The study explores advanced aerodynamic strategies to enhance pressure recovery in ramjet engines, improving their efficiency at supersonic speeds. This achievement underscores the department's commitment to cutting-edge research in aerospace propulsion technologies. Congratulations to Dr. Srinath R and the research team!



Department Of CSE(Cyber Security)

Dr.Dilip Kumar Jang Bahadur Saini has participated in the 6th Doctoral Symposium on Computational Intelligence (DoSCI-2025) as a SESSION CHAIR organized jointly by Institute of Engineering and Technology Lucknow, Campus of Open Learning, University of Delhi, Shaheed Rajguru College of Applied Sciences for Women, University of Delhi and University of Calabria, Italy, on 28th-29th March 2025.



Department Of Electronics and Communication Engineering

The Department of Electronics and Communication Engineering at Dayananda Sagar University takes immense pride in recognizing Dr. Supraja Eduru for her exemplary contributions to academic research as a peer reviewer. Dr. Eduru has been awarded prestigious Reviewer Certificates by Wiley for her expert evaluation of research manuscripts in esteemed international journals. In 2024, she reviewed two manuscripts for the International Journal of Communication Systems and one manuscript for the International Journal of Antennas and Propagation, demonstrating her dedication to maintaining the integrity and quality of scholarly publications. These accolades reflect her expertise in communication systems, antennas, and propagation, as well as her commitment to fostering research excellence.



Dr. Arun Balodi, Professor and Chairman of the Dept. of ECE, SOE, Dayananda Sagar University, Bengaluru, conducted an engaging session on "Creating Interactive Course Materials Using Technology" on March 28, 2025. Organized as part of the International School of Management Excellence (ISME) Diploma in Professor of Practice program, the workshop explored innovative ways to integrate modern technology into educational content. Dr. Balodi shared valuable insights on leveraging digital tools to enhance student engagement, participation, and learning outcomes. The session provided participants with practical strategies to make course materials more interactive, reinforcing the role of technology in improving the overall teaching-learning experience.



Department Of Computer Science and Engineering

Prof. Sasikala N, Assistant Professor, Department of CSE has successfully served as a reviewer for 1 manuscript in the Springer Journal Discover Artificial Intelligence on 24th March 2025.



Dr. George Fernandez and Dr. Revathi V, Associate Professors, extended their service as a session chair for the technical presentation session and contribution towards the successful organization of IEEE sponsored First International Conference on Frontier Technologies and Solutions (ICFTS 2025) held at St. Joseph's College of Engineering, Chennai, Tamil Nadu during 27th and 28th March 2025.



Departmental Activities

Department Of Aerospace Engineering

The Department of AI and Robotics Engineering successfully organized an industrial visit to the Government Tool Room and Training Centre (GTTC), Bangalore, on March 27, 2025, for 4th-semester students. This visit provided hands-on exposure to advanced technologies, including robotic arm control, 3D printing, and CNC machining. Students had the opportunity to interact with industry experts, gaining practical insights into real-world applications of AI and robotics. The department remains committed to enhancing students' technical skills through such industry collaborations, ensuring they stay ahead in emerging technologies.



The Department of Aerospace Engineering proudly celebrates the success of Ms. Deeksha Shetty and Ms. Aini Safiyyah, who secured a spot among the Top 10 Finalists at the prestigious Quest Global Ingenium 2025. Competing against 2878 teams, their project "BoltBots: Autonomous Wind Turbine Inspection," showcased innovative AI-driven solutions for wind turbine maintenance. Guided by Dr. Srinath R, Assistant Professor, Department of Aerospace Engineering, the team received high praise for their concept, which integrates AI-based image analysis and remote monitoring for structural inspections. This recognition underscores our students' excellence in solving real-world engineering challenges. Congratulations to the team on this outstanding achievement!



The Department of Aerospace Engineering organized an Alumni Talk on March 28, 2024, featuring Mr. Rohith S and Mr. David Paul K, esteemed alumni of the department. Mr. Rohith S, currently pursuing M.Tech in Aerospace Engineering at IIT Madras, shared valuable insights on GATE exam preparation and his academic journey at IIT. Mr. David Paul K, working as an Application Engineer at Alten, provided guidance on interview preparation and career opportunities in the aerospace industry. The session proved to be highly informative, motivating students to excel in academics and professional pursuits.



Department Of Computer Science and Engineering

The Entrepreneurship Cell of Dayananda Sagar University successfully conducted an alignment meeting with Mr. Vigneswaran, Delivery Manager - Avionics, Tata Elxsi, on 28th March 2025. The meeting focused on collaboration for a project titled "Application of AI-Integrated Daring Drone System for Safe and Remote Elephant Tranquilization in Human-Wildlife Conflict Management." The session involved valuable insights from Mr. Vigneswaran on streamlining project execution and startup support. Dr. Girisha G S, Dr. Basavaraj N Hiremath, Dr. Sridhar S K, and student representatives Mr. Yogesh, Mr. Tejas, and Ms. Tarita actively participated in the discussion. Special appreciation was extended to all faculty members for their continuous support in nurturing innovation at DSU.



Department Of CSE (Data Science)

The Department of Computer Science and Engineering (Data Science) at Dayananda Sagar University (DSU), in collaboration with IEEE ITS and DSU International Affairs, successfully organized a workshop titled "The Relational Model Changed Our World 50 Years Ago: What We Never Talk About" on March 28, 2025. The session was led by Dr. Sebastian, Dean of the DSTI School of Engineering, France, and focused on the evolution and significance of the relational model in modern database systems. Students gained valuable insights into data management, relational databases, and Structured Query Language (SQL) through both theoretical discussions and hands-on demonstrations. Organized by Assistant Professors Manjula M, Sindhu A, and Godhandaraman T, the event provided an enriching experience, deepening students' understanding of database architecture and its real-world applications.



Department Of CSE (AIML)

Technical Talk on “Machine Learning-Based Segmentation in Cone Beam Tomographic Imaging”

Dr. Mikhail N. Rychagov from the National Research University of Electronic Technology (MIET), Moscow, visited Dayananda Sagar University's Department of CSE (AI & ML) on March 24, 2025, to foster international academic collaboration. As part of his visit, he delivered a technical seminar on "Machine Learning-Based Segmentation in Cone Beam Tomographic Imaging" to 6th-semester B.Tech CSE (AI & ML) students. His talk focused on 2D and 3D machine learning-based segmentation techniques in cone beam computed tomography (CBCT). He discussed his research on segmenting teeth and bones using advanced computer vision algorithms, addressing key challenges such as noise reduction, anatomical landmark detection, and accurate boundary delineation in volumetric medical data.

Dr. Rychagov also provided insights into deep learning model design and training for medical image segmentation, covering performance metrics, dataset considerations, and clinical applications. He highlighted the relevance of ML-based CBCT segmentation in dental diagnostics, surgical planning, and anatomical modeling, demonstrating its real-world impact in the medical field. Staff Coordinators: Dr. Abdul Haq Nalband, Associate Professor, Dr. Sugandha Saxena, Assistant Professor, Dept. of CSE (AI & ML)



Department Of Mechanical Engineering

Industrial Visit to Nandini Milk Dairy (BAMUL), Bengaluru

As part of the ISHRAE Club initiative, the Department of Mechanical Engineering at Dayananda Sagar University organized an industrial visit to Nandini Milk Dairy (BAMUL), Bengaluru, on 26th March 2025 for 4th-semester students. The visit was aimed at providing hands-on exposure to dairy processing systems and industrial automation. Students were accompanied by Prof. Abhilash, Prof. Abhijith N, and Mr. Shivasagar.

Mrs. Shamala, Branch Manager at BAMUL, welcomed the students and gave an insightful overview of the dairy operations, highlighting key processes like pasteurization, packaging, and cold storage. The visit covered various technical areas such as fluid mechanics, thermal systems, and automation in milk processing. Students also toured the Effluent Treatment Plant (ETP), learning about sustainable practices in the dairy industry. This visit offered valuable practical insights, helping students connect classroom learning with real-world engineering applications.



The Department of Mechanical Engineering at Dayananda Sagar University organized a one-week Faculty Development Program (FDP) on “Low-Frequency NVH and Automotive Applications Using Abaqus” from 24th to 28th March 2025. The program was inaugurated by Mr. Krishna Balamurali, Principal Engineer at NV Dynamics, who delivered an inspiring keynote address on the significance of NVH (Noise, Vibration, and Harshness) in the automotive sector. The FDP brought together leading industry experts and academicians including Dr. Mohan Godse, Dr. Vamsi Krishna Balla (TVS Motor Company), Mr. Shiva Kiran A R (Bosch India), and others, who shared valuable insights on NVH fundamentals, sensor technologies, vibration testing, and simulation tools. Sessions included a mix of theoretical lectures, hands-on demonstrations, and technical discussions, offering a comprehensive learning experience for all participants. Throughout the week, faculty from reputed institutions like KLE Technological University, Amrita Vishwa Vidyapeetham, and MS Ramaiah University actively participated, contributing to a dynamic and collaborative academic environment. Highlights included live demonstrations of NVH instrumentation, virtual lab tours, and hands-on training using Abaqus for vibration simulations. The program concluded with thought-provoking sessions on curriculum development and industry-academia collaboration by experts like Mr. Santosh Billur and Mr. Huzefa Salim from La Fondation Dassault Systèmes. The FDP successfully empowered faculty with the knowledge and tools to integrate NVH concepts into their teaching and research, fostering innovation in automotive engineering education.



An NSS event was organized with the support of the Department of Mechanical Engineering. This campaign was initiated by the BWSSB, Government of Karnataka, in a bid to achieve a Guinness World Record for the largest public participation, where individuals took a pledge to save water. Students from the Department of Mechanical Engineering took the pledge to save and conserve water for sustainable usage. Participants received certificates from the Government of Karnataka for their involvement in the pledge.



The Department of Mechanical Engineering at Dayananda Sagar University successfully conducted a 30-day On-the-Job Training program for employees of Strides Pharma Science Ltd., culminating in a valedictory function on 24th March 2025. The event was graced by Chief Guest Ms. Leelavathi from KIADB, GoK, along with Strides representatives Mr. Srinivas Panda (Plant Head, Chandapura) and Mr. Deepak (Senior Manager - HR). Under the leadership of Dr. Vinayak Hemadri, around 20 faculty members from various disciplines contributed to the training sessions. A total of 25 trainees successfully completed the program, which was coordinated by Dr. Seema Tharannum (Biological Sciences) and Mr. Vijay Kumar (Placement Cell). The program marked a significant step in industry-academia collaboration, fostering skill development and professional growth.



Student Activities

The School of Engineering at Dayananda Sagar University recently participated in an online training program on Geodata Processing using Python and Machine Learning, conducted by the Indian Institute of Remote Sensing (IIRS), ISRO Dehradun from February 17, 2025, to February 28, 2025. This program provided valuable insights into geospatial data processing, integrating advanced machine learning techniques. Prof. Sripad Kulkarni S successfully coordinated the program, ensuring seamless participation and knowledge dissemination. Among the participants, Mr. Anshuman (ENG22DS0026) and Mr. Akshat Agarwal (ENG22AM0072) demonstrated outstanding performance, securing A+ grades, with Anshuman attaining 89% attendance and Akshat achieving a perfect 100%. This initiative underscores the university's commitment to cutting-edge education and technological advancement in remote sensing and data science.



CST Students Triumph at Karnataka Elevate 2024-25

The Department of CST proudly congratulates our student team—Mr. Allan, Ms. Swathi, Mr. Shashank, Ms. Saara (8th semester), Ms. Pranathi, Mr. Ripple, Ms. Ashritha (6th semester), and Ms. Yashaswini (4th semester)—guided by Dr. Santosh Kumar J and Dr. Sudha D, for winning Karnataka Elevate 2024-25 with the support of Dr. Shahina Parveen (Chairperson, CST), Dr. Udaya Kumar Reddy (Dean), SoE, DSU.



The Department of Aerospace Engineering is proud to announce that Mr. Stephen Glen Pinto (ENG20AS0031) has successfully cleared the GATE 2025 Examination in Aerospace Engineering with an All India Rank (AIR) of 140. His achievement reflects his dedication, hard work, and technical excellence in the field. Securing a top rank in this highly competitive exam is a testament to his strong academic foundation and problem-solving skills. The department congratulates Stephen on this remarkable accomplishment and wishes him continued success in his future endeavors.



Aerospace Student Completes Industrial Internship at BAIL

The Department of Aerospace Engineering congratulates Mr. Mehul Malhotra (ENG21AS0024) for successfully completing a two-week Industrial Internship Program at Bangalore Aircraft Industries Pvt. Ltd. During the internship, he gained hands-on experience in aircraft component design and stress analysis, enhancing his practical knowledge in aerostructural engineering. Such industry exposure plays a vital role in bridging the gap between academic learning and real-world applications. The department applauds his achievement and encourages students to engage in similar opportunities for professional growth.



Students of CSE (Data Science) - SOE, Akshaya B (ENG21DS0006), Chaitra K (ENG21DS0014), and Shubham Kumar (ENG21DS0039), actively participated in TechXcelerate, a 24-hour hackathon held from March 22 to 23, 2025. Engaging in the AI/ML workshop and coding challenges, they showcased exceptional creativity, problem-solving skills and dedication throughout the event. Organized by Ecell BITS Hyderabad, the hackathon provided a platform for students to collaborate, innovate, and demonstrate their technical expertise.



Mr. Shreyas H Reddy (ENG21CS0388), Mr. Shreyas Sridhar (ENG21CS0389), Mr. Shrinikethan S(ENG21CS0392), and Mr. Sanju John (ENG21CS0361), 8th semester CSE Students received funding of ₹6500 for the project titled “Emergency Traffic prioritization System(ETPS)”, under the guidance of Prof. Sasikala N, Assistant Professor, Department of CSE from J&J construction Benson Town, Bengaluru on 25th March 2025.



Ms. Vaishnavi P (ENG21CS0459), Ms. Archana B S(ENG22CS1021), Ms. Preethi V(ENG21CS0458), 8th semester Students, Department of CSE presented a paper titled “Optimizing Diabetic Retinopathy screening with Machine Learning: A data-driven approach”, under the guidance of Dr. George Fernandez I, Associate Professor, Department of CSE and Dr. Dhathri, Assistant Professor, Department of Ophthalmology, CDSIMER in the IEEE sponsored First International Conference on Frontier Technologies and Solutions (ICFTS 2025) held at St. Joseph’s College of Engineering, Chennai, Tamil Nadu during 27th and 28th March 2025.



Mr. Mohammed Arif (ENG22CS1032), Mr. Sangamesh(ENG22CS1040), Mr. Rakesh P G(ENG22CS1037) and Mr. Yashwanth G M(ENG22CS1043), 8th semester Students, Department of CSE presented a paper titled “Smart management of Crop Monitoring Using Drone Technology”, under the guidance of Dr. George Fernandez I, Associate Professor, Department of CSE in the IEEE sponsored First International Conference on Frontier Technologies and Solutions (ICFTS 2025) held at St. Joseph’s College of Engineering, Chennai, Tamil Nadu during 27th and 28th March 2025.





**SCHOOL OF
ENGINEERING**

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