



DAYANANDA SAGAR
UNIVERSITY



SCHOOL OF
ENGINEERING

SOE - "The Weekly Buzz"

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



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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 George Fernandez I, Associate Professor, Department of CSE, extending his service has Indian external examiner for the Ph.D. final Viva Voice examination of the research scholar Mr. B Manikandan of the title “A Sentiment Aware Product Recommendation System Using Optimization Techniques and Deep Classifiers”, Under the Bharath University during November 2024.



Dr Praveen V Kulkarni, Dr Rajesh TM, Associate Professors and Dr Renuka Devi M N, Assistant Professor, Department of CSE, have successfully presented the paper titled "Predicting cardiac disease using stacked refinement combination machine learning models" in 5th International Conference on Data Science, Computation and Security (IDSCS-24) Organized by the CHRIST(Deemed to be University), India in technical association with The Tejas Scientific Researcher Foundation, India from November 07-09, 2024.



Dr. Revathi V, Associate Professor, Dept of CSE has successfully published Book chapter in the Elsevier Journal “Advances in Intelligent Energy Systems”, with the Book titled “Green Machine Learning and Big Data for Smart Grids Practices and Applications” with the title of the chapter is “Paradigm shift from machine learning to Federated learning” during November 2024.



Dr. Rajesh T M, Associate Professor and Prof. Shankamma S Dhavalagimath, Research Scholar Dept of CSE Received Best Paper Award in the Image Processing and Computer Vision category for paper titled “Improving Image restoration with a Hybrid inverse and Median Filtering Approach” during 5th Congress on Intelligent Systems (CIS 2024) organized by the Department of CSE, CHRIST (Deemed to be University), Bengaluru, during November 2024.



Department Of CSE (Data Science)

Dr. U Pavan Kumar & Prof. Shivamma D, Assistant Professor Dept. of CSE (Data Science) has participated in the MATLAB EXPO 2024 workshop organised by the Mathworks during November 13-14,2024.



We are thrilled to announce that the Department of Computer Science & Engineering (Data Science) at Dayananda Sagar University has established the Oracle Academy Lab at the Harohalli Campus as part of an Industry-Sponsored Initiative. This state-of-the-art lab, supported by Oracle, offers cutting-edge tools and resources designed to bridge the gap between academia and industry, fostering advanced learning opportunities in Data Science and related fields. Key Benefits of Oracle Academy Membership, 100% Free Access: All Oracle Enterprise Edition software, Modular Learning Resources, Includes hands-on labs, projects, challenges, videos and presentations, Professional Development, Free training for educators. All DSU faculty members are encouraged to register for the Oracle Academy to leverage these benefits. Detailed registration steps and additional information are provided in the attachments. A heartfelt thanks to Dr. Suresh Arumugam, Associate Professor, for his initiative and efforts in setting up the Oracle Academy Lab at DSU. This initiative marks a significant milestone in DSU's commitment to academic excellence and industry alignment. Let's make the most of this opportunity!



Department Of CSE (Cyber security)

Dr. Dilip Kumar Jung Bahadur Saini, Associate Professor, CSE(CY),has acted as Session Chair at the 3rd International Conference on Innovative Research and Development (ICIRD-2024) held between 8th-11th November,2024 at Shinawatra University,Thailand.



Department Of CSE (AIML)

Dr. M. Lakshmanan, Assistant Professor, Dept. of CSE (AI&ML) has participated in the Two days Faculty Development Program on “AWS CLOUD PRACTITIONER” Pioneering Innovations in Healthcare organized by the Department of Computer Science and Engineering, Sri Venkateswara College of Engineering from 11 & 12th Nov 2024.



Department Of Electronics and Communication

Dr. S. Arungalai Vendan, Professor, Department of Electronics and Communication, Dayananda Sagar University, was invited as a resource person for the One Week AICTE Training and Learning (ATAL) Faculty Development Program (FDP) on Green Technology. The program was organized by the Department of Energy Science and Technology, Periyar University, Salem, from November 4th to November 9th, 2024.

Dr. S. Arungalai Vendan delivered an expert session on Green Building Design and Architecture on November 6th, 2024, sharing his expertise with the participants. His presentation focused on innovative strategies for sustainable development and energy-efficient architectural practices. This engagement enhanced knowledge exchange and fostered future collaborations between the institutions.



Dr. Pushpa Mala S from the Department of Electronics and Communication Engineering, Dayananda Sagar University, served as the Session Chair at the 3rd International Conference on Innovative Research and Development (ICIRD-2024) held from 8th to 11th November 2024 at Shinawatra University, Thailand. Her role in leading the technical sessions highlights her academic excellence and contributions to international research collaboration.



Dr. Pushpa Mala S, Associate Professor in the Department of Electronics and Communication Engineering at Dayananda Sagar University, participated in WINTECHCON 2024, the 5th IEEE Women in Technology Conference, held under the theme "Accelerating Chip Design in the Era of More-than-Moore". The conference, organized in collaboration with IEEE CAS Bangalore Chapter, IEEE Bangalore Section, and IEEE WIE Council Bangalore, served as a premier platform for women technology leaders to showcase advancements in semiconductor and electronic systems.



Department of Mechanical Engineering

Dr. Ravitej Y P, Assistant Professor in the Department of Mechanical Engineering at DSU, participated in the International Conference on Next-Generation Technologies (ICNGT 2024) held at IIT Madras from 13th to 15th November 2024. The conference, themed "Design and Manufacturing", brought together researchers and industry experts to discuss innovative solutions and advancements in the field. Dr. Ravitej's involvement highlights DSU's dedication to academic and research excellence, fostering collaboration and knowledge-sharing in cutting-edge engineering disciplines.



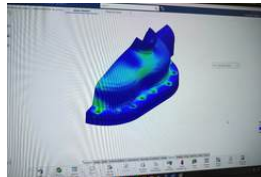
Departmental Activities

Department of Aerospace Engineering

On November 14, 2024, the Department of Aerospace Engineering hosted a donation camp for students at the Thirumurthy Rural Development Centre on Kanakapura Road. Students from the second, third, and fourth years, as well as faculty from the department, actively engaged in this event by giving the Thirumurthy Rural Development Center's necessities and interacting with orphaned students. This event was planned in honor of Children's Day.



The Department of Aerospace Engineering organized a training on structures using SIMULIA 3DEXPERIENCE as part of the Introduction to Finite Element Analysis Course with EDS Technologies Bangalore. Mr Saifali taught the V-semester students about various structural analyses utilizing Simulia 3D experience program. Dr. Avinash and Prof. Sripad Kulkarni S handled this event, which was successfully finished on November 14, 2024, at the Product Design Lab, III floor DSU main campus.



Department of Electronics and Communication Engineering

The Department of Electronics and Communication Engineering, School of Engineering, DSU, organized a Value Added Course on "Diffractive Micro-Optics" from 5th to 15th November 2024 for V Semester students. Conducted by Dr. Vladimir S. Pavelyev, Head of the Department of Nanoengineering and Chief Researcher at Samara National University, Russia, the course provided in-depth knowledge of diffractive optical elements (DOEs), emphasizing theoretical foundations, CAD-based designs and emerging trends in nanophotonics. The sessions covered design techniques, fabrication approaches and the latest advancements in micro-optics, including hands-on training with CAD software. Coordinated by Dr. Vinu R and Dr. Deepthi Chamkur V under the guidance of Dr. Arun Balodi, Chairman of ECE, the course saw active participation from 119 students who gained valuable insights into this cutting-edge field.



The Department of Electronics and Communication Engineering (ECE) at Dayananda Sagar University, in collaboration with Safear India, organized a Robotics Certification Program on 15th November 2024. The program saw enthusiastic participation from 140 students, eager to delve into the exciting field of robotics and automation. The hands-on workshop covered essential topics such as: Sensor Integration using IR sensors. Communication Protocols, including I2C and UART. Writing efficient code with MicroPython.

Robot Testing, Debugging, and Telemetry Data Analysis. Trainers from Safear India, including John Srivastava, Debasis Doki, Abhishek Narayan, and Anjani Tiwari, provided expert guidance, enabling students to build and program autonomous line-following robots. The workshop emphasized practical learning, fostering creativity and problem-solving skills among participants.

The event was convened by Dr. Arun Balodi, Chairperson, Department of ECE, and organized by Dr. Pushpa P.V., Prof. Puneeth S., Dr. Navya R., and Pannati Jayashree A., who served as the student organizer. The Dean of the School of Engineering, Dr. Uday Kumar Reddy, extended his support for the event.

Participants received certificates upon completion and gained valuable industry-relevant skills. This program reflects DSU's commitment to advancing technical education and empowering students with hands-on expertise in emerging technologies.



Department Of CSE (AIML)

On November 13th, 2024, the Department of CSE (AI&ML) at Dayananda Sagar University organized an expert talk on "Unlocking Tomorrow: Interviews Tips to Secure your Dream Job" for the 5th Semester CSE (AI&ML) students. Dr. Vinutha N, Associate Professor, CSE (AI & ML) department welcomed alumni Mr. Rohan R and Mr. M Adarsh Pryan, Product Engineers at Infosys Finacle, to deliver a session on the interview process and career preparation.

They discussed aptitude, problem-solving skills, coding rounds, interview strategies, and post-interview training. Key insights included practicing on platforms like HackerRank and CodeChef and presenting approaches clearly during coding assessments. Technical rounds focus on data structures, DBMS, and problem-solving, with common questions on linked lists, SQL queries, and Unix commands. Students were advised to understand their projects thoroughly and expect project-related queries.

Post-interview, candidates undergo six months of training in foundational topics like C programming, backend development, and dynamic programming, supplemented by Udemy courses and regular assessments. Emphasis was placed on choosing a specific career path like AI or Data Science and building practical skills over certifications. Real-world projects and hands-on experience are prioritized for placements.



The Department of CSE (AI&ML) organized a two-day outreach activity to the “Art of Living International Center” Bangalore on November 11-12, 2024, providing students and faculty with an enriching experience focused on holistic practices, mindfulness, and cultural values. The event included a Bhastrika Pranayama session and a 20-minute guided meditation, promoting stress relief and mindfulness. Participants also visited the Gaushala, gaining insights into ethical animal care and rural sustainability, and the Gurukul, where they explored traditional learning methodologies and ancient Indian spiritual practices.

An introductory session on Art of Living’s values was followed by guided meditation, emphasizing personal development and self-reflection. Participants also enjoyed a Satvik lunch, experiencing nutritious, balanced meals aligned with the wellness theme of the event. Faculty members, including Dr. Bahubali and team on the first day and Dr. Vinutha and team on the second day, played a key role in ensuring the event's success by guiding and supporting students throughout.

The visit fostered a sense of connection with nature, cultural heritage, and wellness, contributing significantly to personal growth. Students appreciated the break from academics and the opportunity to engage in experiential learning. Special thanks were extended to the HoD and the Art of Living Center for their support and hospitality.



Student Activities

Department of Computer Science and Engineering

Mr. Chinnirathod Gandhikumar (ENG22CS0042), 5th semester CSE student has successfully Completed the Online Examination for “Applications & use cases Professional Certification” for the first 2 levels by a RAPIDMINER An ALTAIR Company during November 2024.



Mr. Saikumar Jadhav (ENG22CS0145) and Mr. Rahul Jadhvani (ENG22CS0129), 5th sem CSE students secured best project award in web .0 & Blockchain Track in Quant-A-Maze 2.0 held from 14th-16th November 2024 at NMIT, Bengaluru.



Mr. Yash Soni (ENG22CS0211), 5th sem CSE student, Completed Certification from Tata Group's on the title “Data Visualisation: Empowering Business with Effective Insights” on Forage during 16th November 2024.



Department Of CSE (Cyber security)

Mr.Khushal Kalal(ENG22CY0013),has attended the hands-on Workshop “Copilot Safari” organized by Azure Developer Community in association with Reskill.



Ms.Bindhu N(ENG22CY0031) successfully completed the #include Cohort 4.0, a program organized by She Builds On Azure and supported by Microsoft Azure and the Azure Developer Community. Focus Area: Artificial Intelligence. Event Date: 13th November 2024. This certification highlights her dedication to learning cutting-edge technologies and advancing her skills in Artificial Intelligence. Congratulations, Bindu, on this remarkable accomplishment!



Department of CSE (Data Science)

Priyanka.M (ENG23DS0026) 3rd semester from the “Team Evara” Fashion event won the First Place in the Inter College Fashion event organised by T Johns Institute of Technology held on 16/11/2024.



Department of Aerospace Engineering

Role of MBSE in driving the Digital Transformation organised by AESI Bangalore. On November 14, 2024, third-year students Mr Quaim Johar (ENG22AS0039) and Mr Tejas (ENG22AS0045) from the Department of Aerospace Engineering attended an Industrial Roundtable organized by the Aeronautical Society of India (AeSI) at the AeSI Auditorium in Bengaluru. The students had a good interaction with industrial speakers and were exposed to Model Based Systems Engineering using MathWorks.



Mr K Raghav (ENG21AS0016) and Mr Yashas V (ENG21AS0051) from the department of Aerospace Engineering actively participated in a workshop on "Essentials of Model Rocketry" as part of Inspace's skill development, which was organized by the Astronomical Society of India on November 9-15, 2024 at Jalahalli Bangalore.main Campus.





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