



DAYANANDA SAGAR
UNIVERSITY



SCHOOL OF
ENGINEERING

SOE - "The Weekly Buzz"

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



Week# 2 (Jan 06 to 11th, 2025)

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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 Electronics and Communication Engineering

- Dr. Arun Balodi, Chairman of the Electronics and Communication Engineering Department, Dayananda Sagar University, attended the IEEE Bangalore Section Annual General Meeting 2025 held at the International Institute of Information Technology, Bangalore. The event celebrated the successes of 2024 while charting a strategic vision for 2025, aimed at fostering impactful changes within the technology ecosystem. It highlighted the exceptional contributions of volunteers and professionals, emphasizing the strength of the IEEE community

The meeting provided abundant networking opportunities, enabling valuable connections with peers and leaders from diverse fields. Dr. Balodi expressed gratitude to the organizers for curating an insightful and impactful gathering, underlining the role of collaboration in advancing technology for humanity.

Dr. Arun Balodi, Chairman of the Electronics and Communication Engineering Department, Dayananda Sagar University, attended the Annual General Meeting (AGM) of IEEE CEDA Bangalore on January 11, 2025, held at BGS College of Engineering and Technology, Bangalore.

The event featured warm hospitality and exceptional organization, with Dr. Balodi extending a special acknowledgment to the Director and Management of BGSCET Bangalore for their thoughtful facilitation and support.

The AGM served as a platform for collaboration and exchange of ideas among professionals and academicians, reinforcing the commitment to advancing electronic design automation technologies.



- Ms. Sneha Sharma from Dayananda Sagar University successfully completed the Faculty Development Program (FDP) on Emerging Technologies for Educators: AI, IoT, and AR/VR. The program was conducted by the Electronics and ICT Academy, C-DAC Mohali, in collaboration with Bahra University, Solan, Himachal Pradesh, from January 6 to January 10, 2025. The FDP, supported by MeitY, Government of India, provided educators with insights into the latest advancements in Artificial Intelligence (AI), the Internet of Things (IoT), and Augmented/Virtual Reality (AR/VR). This initiative empowers faculty to integrate these emerging technologies into academic and research endeavours effectively.



Department Of Computer Science & Engineering

Dr. Sivananda L Reddy, Associate Professor, Department of CSE has successfully presented the paper titled “Optimizing Latency and Communication in Federated Edge Computing with LAFEO and Gradient Compression for Real-Time Edge Analysis” in the 6th IEEE International Conference on Mobile Computing and Sustainable Informatics (ICMCSI 2025) organized by Purbanchal University, Nepal, during 7-8 January 2025.



Department Of CSE (AIML)

Dr. Shreyas Rajendra Hole, Assistant Professor, Dept. of CSE (AI&ML) has successfully completed a One Day Faculty Orientation Program on “Empowering Academia: Integrating High-Performance Computing in Education and Research” Organized by Department of Computer Science and Engineering, IIIT Nagpur, Walchand College of Engineering, Sangli Under the aegis of National Supercomputing Mission, Government of India On 6th January 2025.



Department Of CSE (Cybersecurity)

- Dr. Durbadal Chattaraj has actively participated in the hybrid seminar on “The Evolution of Power Management ICs in Semiconductor Industry” by Prof. Qadeer Khan organized by IEEE-IISc VLSI Chapter on January 5, 2025



- Dr. Indushree M has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on “AI and Next-Gen Technologies for a Sustainable World: Breakthroughs in Health, Agriculture, and Intelligent Infrastructure” at DSU from 06/01/2025 to 11/01/2025.



Departmental Activities

Department Of Physics

- The Department of Physics and the Department of Electronics and Communication Engineering, DSU together have organized on 07th of January 2025 an invited special seminar talk by a professional Electronics Design Engineer, Sri. P. Sreenivasa Rao, Senior Member, IEEE and Fellow, IETE on the topic of “An Introduction to Microwave Electronics, Materials and Devices”. Sri. Sreenivas Rao, was a former DRDO scientist and had extensive experience in RF and Microwave Analog Electronics Design and Testing using Agilent/Keysight-ADS software. In his talk, Sri. Sreenivasa Rao has first introduced us to the applications of RF communication systems in Defence and later briefly touched upon various design aspects of how to realize RF electronic circuits, active devices such as filters, phase shifters, patch antenna and passive components such as inductors and capacitors. Actual samples of fabricated circuits were also shown to highlight the complexity involved in design realization. It was also mentioned that miniaturization of microwave electronics is made possible by Monolithic Microwave Integrated Circuits (MMIC) which are available at much cheaper rate than Hybrid MICs due to large volume of production.



Department Of CSE

- "AI and Next-Gen Technologies for a Sustainable World: Breakthroughs in Health, Agriculture, and Intelligent Infrastructure" From January 6th to 11th, 2025, the School of Computer Applications and the Department of Computer Science and Engineering, SOE, DSU in collaboration with AICTE-ATAL, successfully organized a six-day FDP.

The program, inaugurated by Dr. Udaya Kumar Reddy K R, Dean SoE, DSU and presided over by Dr. Amit Bhatt, Vice Chancellor, DSU, aimed to equip over 170 faculty members with insights into cutting-edge AI technologies and their applications in global sustainability. Renowned academics and industry experts delivered enriching sessions on various topics, including AI in agriculture, healthcare innovations, smart technologies for rural development, cybersecurity in precision healthcare, and generative AI in crop management. Participants expressed high satisfaction with the resource persons, program structure, and support from organizers, highlighting the FDP as a valuable platform to foster innovation and address global challenges through AI and next-gen technologies.



- Prof. Arjun Krishnamurthy, Faculty at the Department of CSE , SoE , Dayananda Sagar University was invited to Institute de Technologies du Camboge in Phnom Penh, Cambodia as guest speaker for a workshop in January 2025. The workshop was held at Department de Genie Informatique et Communication. The Institute of Technology of Cambodia (ITC) is the best of Cambodia's higher education institutions. Prof. Arjun successfully conducted the workshop, titled "Bridging AI and NLP", focused on introducing the fundamental concepts of Artificial Intelligence (AI) and Natural Language Processing (NLP) and their diverse applications in various industries.

The workshop sessions covered a comprehensive overview of AI, deep learning, and NLP, emphasizing their practical applications in solving real-world challenges. Additionally, he had the opportunity to demonstrate three hands-on projects on Deep Learning for NLP that provided participants with valuable, practical insights into these technologies. These sessions were attended by approximately 50 participants, consisting of students and research scholars eager to expand their knowledge in this exciting field.

One of the highlights of his visit was the productive discussion with Prof. Lay Heng, the Dean of the Department of Information and Communication Engineering at ITC. We engaged in a utilitarian conversation about potential collaborative research opportunities and prospective joint projects. This discussion marked an important step towards fostering meaningful partnerships between our institutions that will further contribute to advancing research and innovation in AI. The experience at ITC was both enriching and rewarding. Prof. Arjun is confident that this workshop has laid the foundation for future collaborations, and we look forward to the possibility of continuing to work together with ITC on upcoming initiatives, student exchange programs and collaborative research projects. The Department of CSE would like to express sincere gratitude to GIC, ITC for their warm hospitality and to Prof. Lay Heng for his insightful contributions and enthusiasm towards fostering academic and research collaboration.



Department Of AI & Robotics

- Dr. Gangadhar T G and Dr. Pramod Kumar Naik from the AI & Robotics Department visited the Central Manufacturing Technological Institute (CMTI), Government of India, on 07-1-2025 and submitted two ongoing projects:
 1. SLAM Algorithm Development for Autonomous Robots
 2. Parallel Computing

Additionally, discussions were held on potential collaborations for funded projects in various fields. The meeting was highly productive, and the team is optimistic about securing projects in the near future. Dr. Rupam Bhaduri, Professor (Research and Acad.) in the AI & Robotics Engineering Department, participated as a distinguished jury member on 10th January 2025 at the DERBI Foundation. Applications under the EV & Mobility and Clean Tech sectors for the NIDHI PRAYAS (National Initiative for Developing and Harnessing Innovations – Promoting and Accelerating Young and Aspiring Innovators & Startups) program were assessed. This initiative by the Department of Science and Technology, Government of India, provides grants, mentorship, and prototyping facilities to early-stage innovators and startups. Evaluations were carried out based on innovation potential, feasibility of prototypes, and socio-economic impact, contributing to fostering entrepreneurship and technological advancement.



Rotary Club-Orientation program

- On the 8th of January 2025, the Lecture Hall 2 of DSU hosted an impactful orientation program conducted by the Rotarians of the Rotary Club. This program, organized for the nominated member Vidya Sagar Rotary Club DSU and the university's esteemed faculty members, sought to strengthen collaboration and inspire greater engagement in community service initiatives.

The session began with a warm welcome extended by all department chairperson of SOE, who highlighted the Rotary Club's invaluable contributions to humanitarian efforts and community welfare. The event was honored by the presence of two distinguished leaders from the Rotary Club: Dr. Rahula Kadriappa, President of Rotary Vidyasagar, celebrated for his exceptional leadership and commitment to empowering communities. Rotarian Amar Chetan YS, Director of Membership, Rotary JP Nagar, a visionary leader whose efforts have significantly enhanced Rotary's membership and connections.

Additionally, the program was graced by the presence of Dr. Girisha G S, Dept. of CSE, Dr. Vinayak Hemadri Dept. of ME and Dr. Arun Balodi Dept. of ECE- Chairpersons of the School of Engineering (SOE), who plays a pivotal role in driving academic excellence and fostering a spirit of social responsibility among students and faculty members alike. The esteemed speakers inspired the audience with their insights on the Rotary Club's guiding motto, "Service Above Self." They shared compelling stories of impactful initiatives and emphasized the importance of leadership, collaboration, and dedication to societal betterment.

Faculty members from various departments actively participated in the session, reflecting the university's commitment to integrating academic pursuits with meaningful community engagement.

The program concluded with a heartfelt vote of thanks, emphasizing the shared vision of Dayananda Sagar University and the Rotary Club to create a positive and lasting impact on society. This orientation session was a resounding success and further strengthened the bond between Dayananda Sagar University and the Rotary Club, leaving attendees inspired to uphold the spirit of service and compassion in their endeavors.



Student Activities

Department of CSE (Data Science)

- Shashi Kumar C successfully accomplished the official ACE-220: Enterprise Prototyping with Arduino Portenta Proto Kit on 8th January 2025.



- Mr. Sourabh J Gor (ENG21CS0411), Ms. Vishnavi Ananya Gollapalli (ENG21CS0414), Mr. N Rishi Rohan (ENG21CS0256) and Mr. Tejas B (ENG21CS0446) 7th semester CSE Students, under the guidance of Prof. Vishwas D B, Assistant Professor, received a project funding of Rupees 8000/ from Klart Digi for the title, “AI/ML Based Hardware Security for Edge Devices in IoT” on 6 th January 2025.





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