



DAYANANDA SAGAR  
UNIVERSITY



SCHOOL OF  
ENGINEERING

## SOE - "The Weekly Buzz"

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



**Week#9 (Feb 24 to 01st March, 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 and Professor, Department of Electronics and Communication Engineering, Dayananda Sagar University, has successfully completed the micro-learning module on AI for Entrepreneurship, offered by Atal Innovation Mission (AIM), NITI Aayog, and Intel India on February 27, 2025.

This certification highlights Dr. Balodi's dedication to integrating artificial intelligence into entrepreneurship, fostering innovation, and enhancing industry-academia collaboration. His accomplishment further strengthens DSU's commitment to AI-driven advancements in technology and business. Congratulations to Dr. Arun Balodi on this achievement!



## Department Of CSE (AIML)

Dr. Vinutha N, Associate Professor, Dept. of CSE (AI&ML), was honored with the prestigious Bahu Panditya Yajnaseni Award by the KN Foundation. This remarkable event, organized by the KN Foundation, was a heartfelt tribute to the extraordinary achievements of women and the incredible talents of the children from the Vahnikula community. Held on the 1st of March, 2025, at the esteemed Ravindra Kalakshetra, the occasion served as a platform to recognize the resilience, dedication, and outstanding contributions of women while also showcasing the creativity, skills, and promise of the younger generation. It was a day filled with admiration, encouragement, and a vibrant celebration of the community's spirit and talent.



Dr. Bahubali Shiragapur, Professor, Dept. of CSE (AI&ML), has successfully received the certificate of participation for attending the BCI & Neurotechnology Masterclass EEG & fNIRS on February 25, 2025.



The Department of CSE (AI & ML) at Dayananda Sagar University takes immense pride in the remarkable achievements of its faculty members at the 2025 IEEE 1st International Conference on Smart Systems, Data Engineering & Energy (SSDEE-2025) held at Indian Institute of Technology (Indian School of Mines), Dhanbad, from February 28 to March 2, 2025.

Dr. Shreyas Rajendra Hole, along with Dr. Jayavrinda Vrindavanam, presented a research paper titled “Hybrid PCA-Based Machine Learning Models for Predictive Analytics in Urban Health Monitoring Systems,” contributing valuable insights to the field of healthcare analytics. Additionally, Dr. Shreyas Rajendra Hole collaborated with Dr. Mude Nagarjuna Naik to present “Hybrid Approach of TabNet and Transformer-XGBoost for Predicting Traffic Flow in Smart Cities,” offering innovative solutions for traffic management in urban areas. Furthermore, Dr. Shreyas Rajendra Hole, along with Sriramkumar R, showcased their work on “A Design of Hybrid Model and Bayesian Neural Networks for Smart Grid Stability Prediction,” addressing key challenges in smart energy systems.

These research contributions highlight DSU's commitment to innovation and excellence in emerging technologies. The department congratulates the faculty members on their success and extends its appreciation for their dedication to advancing knowledge in AI & ML applications.



Dr. Vegi Fernando A, Associate Professor, Dept. of CSE (AI&ML), has published two book chapters in the Taylor & Francis group. Top of Form Bottom of Form Automated structure of 3D animation methodology to increase the data clustering, P Bhuvaneshwari, R Karthik Ganesh, M Bagya Lakshmi, A Vegi Fernando, Y Harold Robinson, G Ignisha Rajathi, 2025/2/26, Data Science & Exploration in Artificial Intelligence: Proceedings of the First International Conference On Data Science & Exploration in Artificial Intelligence (CODE-AI 2024) Bangalore, India, 3rd-4th July, 2024 (Volume 2), Pages 427, CRC Press.

Enhanced approximate topology generality and identity-related broadcast encryption methodology for improving the security, S. Balaji, P. Bhuvaneshwari, P. Saveetha, A. Vegi Fernando, Y. Harold Robinson, 2025/2/26, Data Science & Exploration in Artificial Intelligence: Proceedings of the First International Conference On Data Science & Exploration in Artificial Intelligence (CODE-AI 2024), pages 434-439, CRC Press.

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Chapter

### Enhanced approximate topology generality and identity-related broadcast encryption methodology for improving the security

By S. Balaji, P. Bhuvaneshwari, P. Saveetha, A. Vegi Fernando, Y. Harold Robinson

Book: [Data Science & Exploration in Artificial Intelligence](#)

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#### ABSTRACT

Home > Computer Science > Artificial Intelligence > Data Science & Exploration in Artificial Intelligence > Automated structure of 3D animation methodology to increase the data clustering

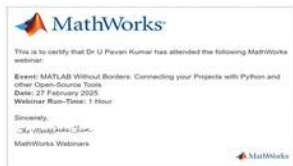


## Department Of CSE (Data Science)

Prof. Manjula M has presented Paper ID 45 title: Integrating IoT and Sensors for comprehensive Road Safety: A Systematic Approach to Accident Prevention at 1st International conference on advances and applications in artificial intelligence (ICAAAI 2025) Organized by Department of CSE, Shri Shankaracharya Institute of Professional Management & Technology, Raipur during 27-28 February 2025



Dr. U. Pavan Kumar has attended the Mathworks Webinar in the MATLAB without Borders: Connecting your Projects with Python and other Open Source Tools by MathWorks on 27th February, 2025.



Dr. U. Pavan Kumar has successfully completed the online course on Introduction to Data Science offered by Simplilearn| Skillup on 1st March 2025.



Dr. Suresh Arumugam, Associate Professor and Prof. Sindhu A, Assistant Professor, Dept of CSE (DS )has successfully participated One Week Faculty Development Program on Applications of Business Analytics from 24th Feb to 1st march 2025, Organized by Department of Business Management , Vaagdevi College of Engineering in association with Pantech learning



Prof. Shivamma D & Prof. Monish L were participated in Hands-on Workshop on Predictive Power-Matlab for Data Science held on 5th March 2025 organized by CoreEL Technologies India Pvt Ltd.



## Department Of CSE (Cyber Security)

Dr. Mubeen Ahmed Khan has successfully presented a research paper titled: "A Comparative Analysis of Machine Learning Algorithms for Dyslexia Detection" at the International Conference RBUCON.Computing'25: Future Computing Technologies for Societal Development, organized by Ramdeobaba University, Nagpur, in association with University of Arad, Romania from February 20-22, 2025. This research contributes significantly to the field of machine learning and healthcare, offering valuable insights into improving dyslexia detection through computational techniques.



Dr. Dilip Kumar Jang Bahadur Saini has contributed as a Session Chair at the International Conference RBUCON.Computing'25: Future Computing Technologies for Societal Development organized by Ramdeobaba University, Nagpur, in association with University of Arad, Romania from February 20-22, 2025.



# Departmental Activities

## Department Of Aerospace Engineering

Department of Aerospace Engineering at Dayananda Sagar University organised an industrial visit to ISRO SDSC SHAR Sriharikota on 28th Feb 2025. In an incredible and insightful experience at ISRO's Satish Dhawan Space Centre (SHAR), the privilege of exploring the First Launch Vehicle (FLV), Second Launch Vehicle, and Mission Control Centre (MCC), witnessing the remarkable advancements that drive India's space missions. Standing where history has been made, the students gained invaluable insights into the dedication, precision, and innovation behind every launch. Dr Prasanthakumar HG and Dr Srinath R and Mr Harish KL accompanied the students for this visit.



## Department Of CSE (Data Science)

The Placement Cell of DSU organized the ServiceNow Placement Training from 24th February to 27th February 2025 at Lecture Hall 2, 'A Block' Ground Floor, SOE. The training sessions were conducted by Prof. Manjula M, Assistant Professor, Department of CSE (Data Science), from 9:00 AM to 4:20 PM each day.

The training program was based on the ServiceNow Administration Fundamentals course, designed to equip participants with essential skills in managing and configuring the ServiceNow platform. The initiative was part of the "RiseUp with ServiceNow" program, which collaborates with global and regional placement partners to bridge the gap between training and employment in the IT service management industry.

Participants completing the course are eligible to take the ServiceNow Certified System Administrator (CSA) exam, a globally recognized certification that serves as a foundation for advanced certifications and career opportunities in IT service management.

The training received positive feedback from participants, highlighting its role in preparing students for industry-relevant skills and enhancing their employability.



The DataScience@DSU Club, in collaboration with the Department of CSE (Data Science), successfully conducted a "Career Guidance and Pre-Placement Training" session on 28th February 2025, from 10:40 AM to 12:20 PM, at A440, SOE, DSU. The event was organized by Dr. Shaila S G (Professor & Chairperson, DS), Prof. Shivamma D and Prof. Monish L (Assistant Professors, CSE - Data Science). Resource Persons: Mr. VijayKumar, Placement Director, SOE, DSU, Mr. Girish, Manager, CTS, SOE, DSU. The session was highly interactive and insightful, equipping students with the necessary knowledge and confidence to excel in their career paths.



## Department Of Computer Science & Engineering

Team E-Cell DSU attended E-Summit 2025 organized by IIT MADRAS from 28/02/2025 to 02/03/2025. They were invited to EDD Conference and along with this they participated in various events such as ENIGMA - The final equation, Designblitz, Investinder and Kaala Quest. Also the Team E-Cell got an investment offer from Speciale Invest and Campus Fund. It was a great opportunity to network and explore.



## Department Of CSE (AIML)

On February 25th, 2025, AI Innovation Day Bhasha Bandhu Hackathon, hosted by the Department of CSE (AI&ML), Dayananda Sagar University (DSU) in collaboration with Bhashini and Microsoft, aimed to address India's linguistic digital divide through AI-driven solutions. The event saw 170+ participants, including students and professionals, working on real-world legal accessibility challenges using Bhashini's AI models and Microsoft's technologies.

The event followed a structured flow: an inauguration, mentor sessions, followed by team-based ideation, development, and pitching. Due to time constraints, submissions were evaluated remotely, and results will be announced in the Bhasha Bandhu app. Selected teams will advance to Round 2 at Microsoft's office in March 2025, competing for ₹1 lakh (first prize) and ₹50,000 (second prize) per domain.

With its success and impact on AI-driven linguistic accessibility, the hackathon sets the stage for future events, mentorship programs, and broader regional outreach, ensuring continued advancements in AI-powered digital inclusion.



The Department of CSE (AI & ML) at Dayananda Sagar University successfully organized the PyLIB Workshop on 28th February 2025, attracting over 270 participants eager to enhance their Python skills. The hands-on sessions covered key libraries like NumPy, Pandas, and Matplotlib, focusing on data analysis, scientific computing, and visualization. A highlight was the mini-JARVIS project, integrating AI techniques such as speech recognition and OpenAI APIs. Led by student facilitators and faculty coordinators Dr. Vegi Fernando A and Prof. Pradeep Kumar K, the workshop provided valuable industry insights, fostering collaboration and practical learning in AI and data science.



The Department of CSE (AI & ML) at Dayananda Sagar University successfully organized “Celebrating Creativity: Elevating Spirits through Cultural Dance Competition” on February 27, 2025. This vibrant event showcased a stunning array of dance performances, including classical, folk, and contemporary styles, as students mesmerized the audience with their talent, passion, and creativity. From Bharatanatyam and Kathak to energetic folk dances like Bhangra and Garba, the event celebrated cultural diversity and artistic expression. Faculty and staff played a pivotal role in supporting and encouraging participants, fostering a sense of community, teamwork, and cultural appreciation. Beyond competition, the event provided a platform for students to embrace their heritage while balancing academics and creativity. The competition concluded on an uplifting note, recognizing the dedication of all performers. The department extends heartfelt gratitude to the faculty, organizers, and students for making this event a resounding success.



## National Science Day Celebration - 2025

The School of Basic Sciences at Dayananda Sagar University celebrated National Science Day on 28th February 2025 at the Harohalli Main Campus, themed “Empowering Indian Youth for Global Leadership in Science and Innovation for Viksit Bharat.” The event was graced by Dr. Udaya Kumar Reddy (Dean, SoE), Dr. K. Vijay Kumar (Chairman, Dept. of Physics), Dr. K. Anand Solomon (Chairman, Dept. of Chemistry), and the resource person, Prof. K. Ramesh (Principal Research Scientist, IISc, Bangalore). The inaugural session featured an invocation song by Dr. Arun, a welcome address by Dr. Sai Prasad Nayak, and insightful speeches by Dr. K. Vijay Kumar and the Dean. Prof. Ramesh delivered an expert talk on “Advanced Materials and Technology” and was later felicitated. The event included parallel competitions such as elocution, math modeling, and quizzes, organized by the Department of Basic Sciences and The Literary Society, with enthusiastic participation from around 60 B.Tech students. A science project exhibition by 1st-year students showcased innovative models addressing real-world challenges. The event concluded with a prize distribution ceremony, where winners received cash prizes and certificates, followed by a vote of thanks by Dr. V. Janardhanam.



# Student Activities

- Mr. Mohammed Abdal Hussain(ENG23CS0112), Ms. Arpita Sahoo (ENG23CS0271), Ms.Vismitha H M (ENG23CS0226), Ms. Varshini Mallayya Guruvainavar (ENG23CS0215), Mr. Bhargav Thupalli (ENG23CS0283), Mr. Harshith Hegde (ENG23CS0320), Mr. Azeem Gundwan (ENG23CS0027) 4th semester CSE students has successfully participated in the AI Innovation Day: Bhasha Bandhu Ideathon on 25th February 2025, organized Department of CSE-AIML, DSU, SOE in collaboration with Microsoft and the Government of India's Bhashini Initiative.
- Mr. Harshith Hegde (ENG23CS0320), 4th semester CSE student has Actively participated in H4CKP13T Ox01 CTF, an International Capture the Flag (CTF) Competition, held on 27th February 2025 organized by H4CKP13T (Department of CSE Cybersecurity).



Mr.Nagajayanth A S(ENG23CY0073) has successfully completed the CC Course Conclusion & Final Assessment, receiving certification on February 26, 2025. This certification, valid for three years, demonstrates his commitment to continuous learning and professional growth.



Students from DSU showcased their research titled "Computational Analysis using Multi-ligand Simultaneous Docking of Withaferin-A and Garcinol Reveals Enhanced BCL-2 and AKT-1 Inhibition" at the Innovation in Computing and Engineering conference, held from February 28 to March 1, 2025, at Shiv Nadar Institution of Eminence, Delhi-NCR, and won the Best Paper Award. The research, conducted under the guidance of Dr. Pronama Biswas (SBAS) and Dr. BM Ashwin Desai (School of Engineering) at the Synergistic Technologies for Biological Solutions Lab, DSU, explored the synergistic effects of natural compounds in targeting cancer-related proteins. Their findings highlighted the power of computational techniques in accelerating drug discovery, demonstrating how in silico methods can efficiently identify promising therapeutic agents, paving the way for innovative cancer treatment approaches.



Sadgi Jaiswal (ENG23DS0082), Ayush Singh (ENG23DS0098), Vedeshwari Nakate (ENG23DS0075), Amit Singh (ENG23DS0096), Sai Krishna S (ENG23DS0083), Mr. Vaishanth Mohan(ENG23CY0044) and Soumya Singh (ENG23DS0125), has successfully participated in the AI Innovation Day: Bhasha Bandhu Ideathon on 25th February 2025 organized in collaboration with Microsoft and the Government of India's Bhashini Initiative. has successfully participated in the AI Innovation Day: Bhasha Bandhu Ideathon on 25th February 2025 organized in collaboration with Microsoft and the Government of India's Bhashini Initiative.



Mr. Nithin Kataria V (ENG24CS0151), Mr. D A Ajay(ENG24CS0052) and Ms. Garima (ENG24CY0105) 2nd Semester CSE students as a team participated in Kala Quest competition held at IIT Madras during 28th February 2025 and won the Runner Up (2nd Prize) of KalaQuest! prize money 8,000 Rs on March 11th 2025 along with certificates.



CSS Krishna Kaushik (ENG21AM0020), 8th semester student, dept. of CES(AI&ML), has presented a paper titled “Hybrid Spiking Neural Network-Attention Model for Multi-Class Heart Disease Detection” at the 6th International Conference on Recent Advances in Information Technology (RAIT) 2025, held at the Indian Institute of Technology (Indian School of Mines), Dhanbad, India, from March 6 to 8, 2025.



Yudhajit Jana (ENG22AM3021), 8th semester student, dept. of CES(AI&ML), has presented a paper titled Attention-Enhanced Transfer Learning for Emphysema Classification Using CBAM-Augmented ResNet-50 at the 6th International Conference on Recent Advances in Information Technology (RAIT) 2025, held at the Indian Institute of Technology (Indian School of Mines), Dhanbad, India, from March 6 to 8, 2025.



Sayli Pankaj Bande (ENG21AM0112), 8th semester student, dept. of CES(AI&ML), has presented a paper titled “Augmenting Medical Diagnostics with AI: A Dual Approach Using RAG-Based Chatbots and Nano GPT Models” at the 6th International Conference on Recent Advances in Information Technology (RAIT) 2025, held at the Indian Institute of Technology (Indian School of Mines), Dhanbad, India, from March 6 to 8, 2025.





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