



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 Aerospace Engineering

Dr. Prasanthakumar H. G., Assistant Professor, Department of Aerospace Engineering, DSU, presented a research paper titled "Design and Analysis of PCB-Integrated 1U CubeSat Structure for Enhanced Payload Capacity" at the IEEE Space Conference 2025 on 21st July 2025. The paper was co-authored by Prof. Sripad Kulkarni and Mr. Charan Raj (ENG23AS0002) from the Department of Aerospace Engineering, DSU.

On 23rd July 2025, Mr. B. Kartik (ENG22AS0003), Mithun P. (ENG22AS0034), and Nikhil N. P. (ENG22AS0011) presented a research paper titled "Advancing Wildlife Conservation: AI-Driven Weight Estimation Drones for Accurate and Efficient Wildlife Management" at the prestigious IEEE Space Conference 2025, held in Bangalore. The work was carried out under the guidance of Prof. Sripad Kulkarni.



Department Of Computer Science and Engineering

Prof. Mala B A, Assistant Professor, Department of CSE has published a paper titled “A Decentralized Electronic Health Record System to Enhance Data Security and Accessibility in Healthcare Using Ethereum Blockchain Technology” in the Grenze International Journal of Engineering and Technology during July 2025, which was presented in the Second International Conference on Emerging Technologies in Science and Engineering, Akshaya Institute of Technology, Tumkur, Karnataka.



Prof. Mala B A, and Prof. Arpita Paria, Assistant Professors, Department of CSE has published a paper titled “AVI-Based Assessment of Communication Skills and Personality Characteristics” in the Grenze International Journal of Engineering and Technology during July 2025, which was presented in the Second International Conference on Emerging Technologies in Science and Engineering, Akshaya Institute of Technology, Tumkur, Karnataka.



Prof. Bharath M B, Assistant Professor, Department of CSE has published a paper titled “Cross-Site Scripting Attack Detection: A Comparative Study of Traditional and Deep Learning-Based Solutions”, in the *Grenze International Journal of Engineering and Technology* during July 2025, which was presented in the *Second International Conference on Emerging Technologies in Science and Engineering*, Akshaya Institute of Technology, Tumkur, Karnataka.

Prof. Benaka Santhosha S, Assistant Professor, Department of CSE has published a paper titled “Efficient Partial Image Encryption Using Genetic Algorithm for Time Saving Applications” in the *Grenze International Journal of Engineering and Technology* during July 2025, which was presented in the *Second International Conference on Emerging Technologies in Science and Engineering*, Akshaya Institute of Technology, Tumkur, Karnataka.

Prof. Dharmendra D.P, Assistant Professor, Dr. Rajesh T M, Associate Professor, Department of CSE and Dr. Jayasudha B, Professor, Dept of Dentistry, CDSIMER, DSU has published a paper titled “Investigation on Advances in canines and premolars width estimation in the given Dental Panoramic Radiographic Images” in the *Grenze International Journal of Engineering and Technology* during July 2025, which was presented in the *Second International Conference on Emerging Technologies in Science and Engineering*, Akshaya Institute of Technology, Tumkur, Karnataka.



Department Of CSE (AIML)

Ramaiah Institute of Technology (RIT) successfully hosted a five-day Faculty Development Programme on “Mathematics for Artificial Intelligence” from 21st to 25th July 2025, bringing together academic leaders and industry experts to enhance faculty expertise in AI pedagogy. Notably, Prof. Pradeep Kumar K., Assistant Professor, Dept of CSE (AIML), SOE-DSU, delivered an insightful session on 23rd July titled “Demystifying Natural Language Models: From Fundamentals to Functional Code,” which blended mathematical foundations with practical code demonstrations for Natural Language Models using Python. His interactive approach empowered faculty to integrate advanced AI concepts and hands-on programming into their teaching. The event featured distinguished speakers from reputed institutions and tech organizations, fostering collaborative knowledge exchange and advancing multidisciplinary education in artificial intelligence.



Prof. Trupthi Rao, Assistant Professor, Dept. of CSE (AI&ML) has participated in the "IEEE Signal Processing Society Seasonal School on Explainable AI for Biometric Signal Processing", held from 16 July to 20 July 2025. The event was organized by Computer Vision and Biometrics Lab (CVBL), Department of Information Technology, Indian Institute of Information Technology Allahabad.



Dr. Joshuva Arockia Dhanraj, Associate Professor, Department of CSE (AI & ML), Dayananda Sagar University, has been recognized as a Technical Committee Member for the upcoming 3rd International Conference on Intelligent Computing and Robotics (ICICR 2026), to be held in Paris, France, from June 12–14, 2026. His selection reflects his continued contributions to the advancement of intelligent computing and robotics on a global platform.



Dr. Joshuva Arockia Dhanraj, Associate Professor, Department of CSE (AI & ML), Dayananda Sagar University, has been selected as a Technical Committee Member for the 3rd International Conference on Machine Intelligence and Digital Applications (MIDA 2026), scheduled to take place in Xi'an, China, from April 24–26, 2026. His inclusion in the committee reflects his ongoing contributions to the fields of machine intelligence and digital innovation.



Dr. Joshua Arockia Dhanraj, Associate Professor, Department of CSE (AI & ML), Dayananda Sagar University, received a Reviewer Certificate from Springer Nature in recognition of his contribution to the peer review process for Energy Informatics in 2025. His review of a manuscript exemplifies his commitment to maintaining academic integrity and supporting high-quality scholarly publishing.



Department Of Electronics & Communication Engineering

Dr. Arun Balodi, Professor and Chairman, Department of Electronics and Communication Engineering, Dayananda Sagar University, was a Distinguished Expert Speaker at the 5-day online Faculty Development Programme on Intelligent Systems and Emerging Technologies in Computing and Electronics (ISETCE-2025), jointly organized by SoCS, UPES Dehradun, and NIT Jamshedpur. On 21st July 2025, he delivered a session on “AI-Powered Diagnostic Medical Imaging,” emphasizing the role of AI in enhancing diagnostic precision and patient care, which led to engaging discussions on the integration of healthcare and intelligent systems.



Dr. Arun Balodi Invited as Expert Speaker at IEEE FDP on AI-Powered Robotics

Dr. Arun Balodi, Professor and Chairman, Department of Electronics and Communication Engineering, Dayananda Sagar University, Bengaluru, was invited as a Resource Person at the 5-Day Faculty Development Program (FDP) on “AI-Powered Robotics in Industrial Automation Applications for Future Research,” held from July 26–30, 2025. Organized by the IEEE RAS Bangalore Chapter in collaboration with the IEEE BGS Student Branch Chapter, the FDP was hosted by BGS College of Engineering and Technology. Dr. Balodi delivered a session on “Robotics in Healthcare”, discussing the role of AI-driven robotics in enhancing medical diagnostics and treatment.



BGS College of Engineering and Technology BGS Student Branch Chapter			
IEEE RAS BANGALORE CHAPTER in association with IEEE BGS STUDENT BRANCH CHAPTER			
5 Days FDP on AI Powered Robotics in Industrial Automation Applications for Future Research July 26-30, 2025			
Program Schedule			
Date	Time	Activity/Session	Topic
July 26, 2025 10:00 AM to 12:00 PM	10:00 AM to 11:00 AM	Registration	
	11:00 AM to 12:00 PM	Dr. Arun Balodi Introduction to AI-Powered Robotics	Introduction to Robotics and AI
July 27, 2025 10:00 AM to 12:00 PM	10:00 AM to 11:00 AM	Dr. Arun Balodi Introduction to AI-Powered Robotics	Introduction to Robotics and AI
	11:00 AM to 12:00 PM	Dr. Arun Balodi Introduction to AI-Powered Robotics	Introduction to Robotics and AI
July 28, 2025 10:00 AM to 12:00 PM	10:00 AM to 11:00 AM	Dr. Arun Balodi Introduction to AI-Powered Robotics	Introduction to Robotics and AI
	11:00 AM to 12:00 PM	Dr. Arun Balodi Introduction to AI-Powered Robotics	Introduction to Robotics and AI
July 29, 2025 10:00 AM to 12:00 PM	10:00 AM to 11:00 AM	Dr. Arun Balodi Introduction to AI-Powered Robotics	Introduction to Robotics and AI
	11:00 AM to 12:00 PM	Dr. Arun Balodi Introduction to AI-Powered Robotics	Introduction to Robotics and AI
July 30, 2025 10:00 AM to 12:00 PM	10:00 AM to 11:00 AM	Dr. Arun Balodi Introduction to AI-Powered Robotics	Introduction to Robotics and AI
	11:00 AM to 12:00 PM	Dr. Arun Balodi Introduction to AI-Powered Robotics	Introduction to Robotics and AI

Dr. Arun Balodi, Chairman of the Department of ECE, Dayananda Sagar University, participated in the prestigious Second International Conference on Space, Aerospace & Defence (SPACE 2025), held on July 22–23, 2025 at the Sheraton Grand, Bengaluru. Organized under the leadership of Mr. Puneet Kumar Mishra and the IEEE Bangalore Section, the event brought together experts from across the globe. Dr. Balodi presented two research papers: “Analysis of Different Deformation Shapes of Flexible Patch Antenna” (co-authored with Ayyala Kishore Ajay Kumar, Owais Ahmad Shah, and Anil Kumar). “Analysing the Evolution of Machine Learning Methodologies for Antenna Design through Structural Topic Modelling” (co-authored with Manoj Tolani, Ambar Bajpai, and Owais Ahmad Shah). His contributions highlighted innovations in antenna design and the integration of AI-driven methodologies in space and defence applications. Congratulations to Dr. Balodi on this achievement!



Dr. Arun Ananthanarayana, Associate Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, has co-authored a research paper titled: “A Secure Key Escrow Mechanism Using ECC for Distributed Mobile Networks and Cloud Services” This paper was presented at the 4th OPU International Technology Conference on Innovations and Advancements in Industry 5.0 (OTCON) 2025, and published by IEEE. The research introduces a novel Key Escrow architecture using Elliptic Curve Cryptography (KECC), offering a highly efficient and secure method for protecting data in distributed mobile and cloud environments. By leveraging Shamir’s threshold secret exchange and elliptic curve cryptography, the mechanism significantly reduces storage needs, optimizes processing time, and ensures robust privacy through sub-key splitting and randomized integration.



Departmental Activities

Department Of Computer Science and Engineering

The School of Engineering, Department of CSE, participated in an industrial visit to Infosys, Electronic City, Bengaluru, on 25th July 2025, for the launch of the AWS Skill Builder program on Infosys Springboard. Faculty and student representatives explored the platform's role-based and certification-oriented learning paths, hands-on labs, and progress tracking tools designed to enhance industry readiness in cloud technologies. The event featured insightful sessions by AWS experts, including Mathias Otte, Deepthi Chima Kurthi, and Garima Joshi Sikka, and outlined strategies for integrating the AWS learning stack into academic activities, mentoring frameworks, and certification pathways. The Department was represented by Dr. Basavaraj N Hiremath (SPOC Infosys Springboard & Professor, CSE), Dr. Savitha Hiremath (Associate Professor, CSE), Dr. Gayathri T (Assistant Professor, CSE), Prof. Muthu Bala N (Assistant Professor, CSE), and student team members Nandini R (ENG22CS0108), Diya S Reddy (ENG23CS0063), Bindu Malagi (ENG24CS1004), and Ranjita Mugali (ENG24CS1015), Dept. CSE, SOE-DSU.



The Departments of Computer Science & Engineering and Computer Science & Engineering (AI & ML), School of Engineering, Dayananda Sagar University, jointly organized a one-day workshop on “Snowflake Platform Training – AI Cloud Skills” on 25th July 2025. Coordinated by Dr. Savitha Hiremath (CSE) and Dr. Vinutha N (CSE – AI & ML), the workshop introduced participants to Snowflake’s modern cloud-native data warehousing platform, covering its architecture, multi-cloud compatibility, secure data sharing, and advanced features like micro-partitioning and role-based access control. The hands-on sessions enabled faculty, students, and external participants to gain practical experience in deploying and managing Snowflake environments, fostering skills in cloud-based data analytics and supporting the integration of industry-relevant technologies into academia. The event also featured an address by Dr. Prakash S, Pro Vice Chancellor, and technical insights from Mr. Vasu Jambunathan, Resource Person.

DAYANANDA SAGAR UNIVERSITY
 SCHOOL OF ENGINEERING
 DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
 DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING (AI & ML)

ONE DAY WORKSHOP ON
Snowflake Platform Training
 AI CLOUD SKILLS

01 DAY WORKSHOP ON
25th JULY 2025

Resource Person
Mr. Vasu Jambunathan
 Senior Technical Instructor
SNOWFLAKE

Chief Patron:
Dr. Hemachandra Sagar,
 Chancellor, DSU
Dr. Prachandra Sagar,
 Pro-Chancellor, DSU

Resource Person
Suhruth Shyam Kolisetty
 Technical Instructor
SNOWFLAKE

Patrons:
Dr. B.S. Satyanarayana, Vice Chancellor, DSU
Dr. Prakash S, Pro Vice Chancellor, DSU
Dr. Puttanadappa, Registrar, DSU
Dr. Udaya Kumar Reddy K R, Dean, SOE, DSU

Conveners:
Dr. Girisha G S, Chairperson, CSE
Dr. Jayavinda Vinodharam V,
 Chairperson, CSE (AI&ML)

Faculty Co-ordinators:
Dr. Savitha Hiremath, CSE
Dr. Vinutha N, CSE (AI&ML)

Participants: University Educators



Student Activities

On 25th July 2025, students from the Department of Aerospace Engineering, DSU, Nikhil N.P. (ENG22AS0011), Mithun P. (ENG22AS0034), Sripad (ENG22AS0015), Tejas (ENG22AS0045), Qasim (ENG22AS0039), Aagneyee (ENG22AA0022), and Vishesh (ENG23AS5001) – visited the Bangalore Space Expo at BIEC Exhibition Centre. The visit offered a valuable hands-on experience with innovations in satellite systems, launch vehicles, and interplanetary missions. Supported by Druva Aerospace, the team also explored HAM radio communication and space technology applications. This exposure deepened their technical knowledge and fostered future collaboration with industry leaders.



Ms. Sindhu BC (ENG22CS0171), Mr. Snehal R(ENG22CS0177), Mr. Joel Cheriyan(ENG22CS0075) and Mr. Sohan M(ENG22CS0178) 4th year CSE students presented a paper titled “Virtual Try-On System” under the guidance of Prof. Kavyashree Pattan, Assistant Professor at the 3rd World Conference on Communication & Computing (WCONF 2025), held from 25th to 27th July 2025.



Mr.Kishan.G.A(ENG23CY0020) has received certificate of completion for the course titled "Cybersecurity Analyst Job Simulation" by Forage(Inspiring and empowering future professionals" on July 28,2025. Over the period of July 2025, Kishan G A has completed practical tasks in: Identity and access management (IAM) fundamentals, IAM strategy assessment, Crafting custom IAM solutions, Platform integration.





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