DAYANANDA SAGAR UNIVERSITY

ACCREDITED WITH GRADE A+ NAAC

SCHOOL OF ENGINEERING

SOE - "The Weekly Buzz"

The Official Weekly Newsletter of School of Engineering

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 CSE(Cyber Security)

Dr. Mubeen Ahmed Khan, faculty member at DSU, has authored a textbook titled "Machine Learning with Python: A Practical Approach", published by Scicrafthub Publication. The book, bearing the International Standard Book Number (ISBN) 978-81-982185-0-6, was officially released on February 18, 2025.

CERTIFICATE OF APPRECIATION

This is to certify that

Dr. Mubeen Ahmed Khan

is the author of the Textbook Titled " MACHINE LEARNING WITH PYTHON: A PRACTICAL APPROACH", the book holds the International Standard Book Number (ISBN) 978-81- 982185-0-6 and is released on February 18, 2025.

Scicrafthub Publication is officially recognized by the Raja Rammohun Roy National Agency for ISBN, Operating under the Department of Higher Education and the Ministry of Human Resource Development, as well as ministry of MSME, Government of India

SCICRAFTHUB PUBLICATION

Dr. Dilip Kumar Jang Bahadur Saini, has been honoured by the Ideal Institute of Technology for his valuable contribution as a Webinar Speaker. He conducted an insightful and engaging session on "Artificial Intelligence in Smart Healthcare" on February 17, 2025, at 12:30 PM (Virtual Mode). His expertise in AI-driven healthcare advancements provided attendees with valuable knowledge on AI applications, future possibilities, and its transformative impact on the healthcare sector.

- Prof. Sharanabasappa Tadkal has successfully completed the below courses CC Domain 1: Security Principles certification on February 19, 2025. This certification validates expertise in foundational cybersecurity principles, reinforcing the importance of security best practices in today's digital landscape.

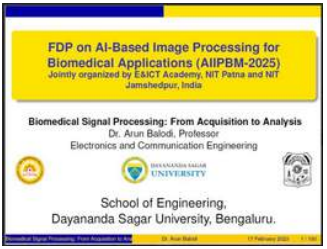
CC Domain 2: Incident Response, Business Continuity, and Disaster Recovery Concepts certification on February 19, 2025. This credential recognizes expertise in mitigating security incidents, ensuring business continuity, and implementing disaster recovery strategies—critical skills in today's cybersecurity landscape.

CC Domain 3: Access Control Concepts certification on February 20, 2025. This achievement highlights expertise in access control mechanisms, authentication methods, and identity management, essential for securing digital assets.

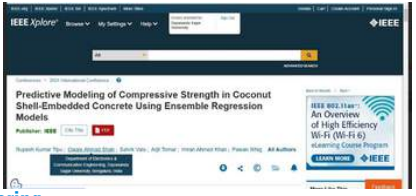
Department Of Electronics and Communication Engineering

Dr. Arun Balodi, Chairman and Professor, Department of Electronics and Communication Engineering, DSU, delivered a session on “Biomedical Signal Processing: From Acquisition to Analysis” on February 17, 2025, at the Faculty Development Program (FDP) on AI-Based Image Processing for Biomedical Applications (AIIPBM-2025).

The FDP was jointly organized by the E&ICT Academy, NIT Patna, and NIT Jamshedpur. Dr. Balodi’s session covered biomedical signal processing techniques, data acquisition methods, and AI-based analysis for healthcare applications. The insightful session provided participants with a comprehensive understanding of biomedical imaging and signal interpretation. Dr. Balodi expressed his gratitude to Dr. Jayendra Kumar (NIT Patna) for the opportunity to contribute to this prestigious program.



Dr. Owais Ahmad Shah, Assistant Professor, Department of Electronics and Communication Engineering, Dayananda Sagar University, Bengaluru, has contributed to a research paper published in IEEE Xplore. Titled "Predictive Modeling of Compressive Strength in Coconut Shell-Embedded Concrete Using Ensemble Regression Models," the study applies machine learning techniques to optimize sustainable concrete materials.



Mr. Puneeth S, Assistant Professor at the Department of Electronics and Communication Engineering, Dayananda Sagar University, successfully completed the AICTE Training and Learning (ATAL) Academy Faculty Development Program (FDP) on Next-Gen Computing: Exploring Supercomputing, AI, and Quantum Technologies. The FDP was conducted at National Institute of Technology Sikkim from February 10 to February 15, 2025. This program provided valuable insights into emerging computational technologies, including high-performance computing, artificial intelligence, and quantum computing, equipping faculty with the latest advancements to enhance research and pedagogy.


ATAL

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi- 110070

AICTE Training and Learning (ATAL) Academy

Certificate

Dr. Pushpa P.V. professor, Department of Electronics and Communication Engineering, Dayananda Sagar University, presented a research paper titled “Cancer Cell Detection Using a Hybrid Quantum and Classical Machine Learning Model” at the 3rd International Conference on Futuristic Technologies (INCOFT-2025) on February 21-22, 2025. The study explores quantum-classical machine learning for improved cancer detection, showcasing innovative AI applications in healthcare. This achievement highlights the department’s commitment to cutting-edge research.


3rd International Conference on Futuristic Technologies (INCOFT-2025)

21st – 22nd February 2025

Certificate

This is to certify that Dr./Prof./Mr./Ms. Pushpa P.V. has presented paper entitled Cancer Cell Detection Using a Hybrid Quantum and Classical Machine Learning Model in 3rd International Conference on Futuristic Technologies (INCOFT-2025) during 21st to 22nd February 2025.

Dr. Chanakya Kumar Jha

General Chair-INCOFT 2025

Department Of Computer Science and Engineering

Dr. Bipin kumar Rai, Professor, Department of CSE has successfully completed online courses on the Infosys Springboard platform with the course titles “Introduction to Data Science”, “Introduction to Artificial Intelligence”, “Introduction to Deep learning”, “Introduction to Natural Language Processing” and “Computer Vision 101” during 17th, 19th and 22nd February 2025.

Prof. Sasikala, Assistant Professor, Department of CSE has successfully served a reviewer for 1 manuscript in the springer Journal Discover Artificial Intelligence on 22nd February 2025.

Dr. S. Gokulakrishnan, Assistant Professor, Department of CSE Successfully completed an online 20 hours AWS Academy Graduate – AWS Academy Cloud Foundations certificate during 22nd February 2025.

Dr. Renuka Devi M N, Assistant Professor and Ms. Talupula Jahnavi (ENG22CS0478), 6th Semester, Department of CSE has successfully presented a research article in the Springer nature International Conference on Advancements in Computing technologies and Artificial Intelligence (Computatia-2025) with the title “Analysis of Fruits and Vegetable conditions using Image Processing” organized by Vivekananda Global, University, Jaipur during 21st and 22nd February 2025.

Dr. Damodharan, Assistant Professor, Department of CSE has successfully attended two days' workshop in the company called "EMATIX Embedded & Software Solutions Pvt Ltd!" in the name of "Next-Gen Embedded Systems Development workshop" from 18th and 19th February 2025.

Department Of CSE (Data Science)

Dr. Vinutha N & Dr. U. Pavan Kumar, Associate Professor, Dept. of CSE (AI&ML and Data Science), SOE, DSU, has successfully Participated in the One Week National Level Faculty Development Program on AI Tools organized by DAYANANDA SAGAR ACADEMY OF TECHNOLOGY and MANAGEMENT in association with Brainovision Solutions India Pvt Ltd in collaboration with All India Council for Technical Education (AICTE) During the period of 17th to 21st February 2025. We commend your dedication to enhancing your knowledge with AI TOOLS.

Dr. Santhosh Kumar G has successfully participated in the One Week National Level Faculty Development Program on “AI Tools” organized by Mahatma Gandhi Mission’s College of Engineering and Technology in association with Brainovision Solutions India Private Ltd. in collaboration with All India Council for Technical Education (AICTE) during the period of 17th to 21st February 2025.

Prof. T. Godhandaraman has successfully participated in the Five-Day International Faculty Development Program on “AI in Cyber Security” organized by RAMCO Institute of Technology, Department of Artificial Intelligence and Data Science, held from February 17, 2025 to February 21, 2025.

Departmental Activities

Department Of Electronics and Communication Engineering

The Department of Electronics and Communication Engineering, Dayananda Sagar University, organized an expert lecture on Intellectual Property Rights (IPR) on February 19, 2025, as part of the Student Development Program (SDP). The session was delivered by Dr. M Shahina Parveen, Professor and Chairperson, Department of Computer Science & Technology, DSU, Bengaluru.

The session aimed to enhance students' understanding of fundamental principles of IPR, including patents, copyrights, trademarks, and their practical applications. Dr. Shahina Parveen provided valuable insights into the emerging trends in intellectual property protection and its significance in fostering innovation and entrepreneurship.

The event was successfully coordinated by Dr. Arun Balodi, Professor and Chairman, Department of Electronics and Communication Engineering, DSU. The lecture received an enthusiastic response from students and faculty members, who actively participated in discussions on legal frameworks and real-world applications of intellectual property.

This session was instrumental in inspiring innovation and equipping participants with essential knowledge to navigate the evolving landscape of intellectual property in the digital era.

Department Of Computer Science & Engineering

Department of Computer Science & Engineering, Dayananda Sagar University On 17th February 2025, students and faculty from the CSE Department had the opportunity to visit the UR Rao Satellite Centre (URSC), Bengaluru—a hub for satellite development and space research. Objectives of the Visit, Gain knowledge about satellites and rockets, Explore the URSC exhibition featuring satellite and rocket prototypes, Engage in an interactive Q&A session with ISRO experts. Key Highlights, Satellite Prototypes & Models – The exhibition displayed scaled models of Aryabhata, Bhaskara, Mangalyaan, Astrosat, IRNSS, INSAT-2, and RISAT, offering insights into India's space missions.

Future Missions – Insights into ISRO's upcoming projects, including the Next Generation Launch Vehicle (NGLV), designed for higher payloads, reusability, and cost efficiency. Interactive Q&A Session – Students explored topics such as satellite power systems, communication mechanisms, propulsion techniques, and payload configurations, gaining deeper knowledge of space technology. Takeaways

The visit provided an invaluable learning experience, showcasing India's advancements in space exploration. It inspired students to explore careers in aerospace, satellite communication, and research. A special thanks to Dr. Gopalsharma R Joshi, Dr. Rajesh TM, and Dr. Renuka Devi M N for organizing this insightful visit, and to ISRO-URSC for their guidance!

Department Of Computer Science and Technology

The Department of Computer Science & Technology conducted orientation sessions for 4th-semester students on 17th February 2025. The session started with the address by the chairperson, Dr. M Shahina Parveen, where she welcomed the 4th semester students to the classes. She gave complete insight into the academics, placements, start-ups, technical and non-technical events. She also mentioned the involvement of the students in the departmental activities and also the importance of the curriculum, and importance of attendance, informing about university regulations, discipline, mentoring, DO'S and DON'TS. Lastly, the orientation ended with general information about the semester and the Course objectives syllabus and course outcomes, how the entire semester would be working, and so on by the class advisor, Prof Vinayaka V M.

The Department of Computer Science & Technology has organized a Workshop on “Research Paper Writing Using Latex” on 18th February 2025. Students successfully completed the workshop. Resource Person: Prof. Junaid, Assistant Professor, CST, DSU. Students are able to understand the Provide participants with a comprehensive understanding of the fundamental concepts of research. Help participants master the art of scholarly paper writing, focusing on clear organization, proper citation and referencing, and effective communication of research findings. Enable participants to critically evaluate research studies, identifying strengths and weaknesses in research designs, methodologies, and data analysis techniques. A total of 96 students registered for this workshop and completed the workshop successfully. We have received a very good response from the students. Prof. M. Chithambarathanu, Assistant Professor CST have organized this workshop.

Department Of CSE (AIML)

On February 18, 2025, the Department of CSE (AI & ML) at Dayananda Sagar University organized an insightful event titled “Implementing Sustainable Development Goals”. The session aimed to address global challenges like poverty, inequality, health, education, environmental sustainability, and economic growth. Ms. S.V.K.R. Rajeswari led the session, engaging both in-person and online audiences. She provided an in-depth understanding of SDGs, their significance, and the necessary actions to achieve them. The session emphasized the role of academicians in contributing to SDGs and showcased senior students' projects aligning with sustainable goals in various fields like healthcare, automobile technologies, space applications, and sports analytics. Faculty and students were also guided on incorporating SDG-related keywords in research papers.

Key challenges such as funding, lack of awareness, and resistance to change were discussed, along with DSU’s solutions, including research grants, awareness campaigns, and policy incentives. The session concluded with a call for interdisciplinary collaboration, continuous research, and innovation to drive sustainable development by 2030. Participants were encouraged to align their academic and professional efforts with SDGs for a sustainable future.

On February 20, 2025, The Anti-Ragging Awareness Activity was conducted by the CSE (AI & ML) Department at Dayananda Sagar University. The event, chaired by Dr. Jayavrinda Vrindavanam V and coordinated by Dr. Shreyas Rajendra Hole, aimed to educate students on the harmful effects of ragging and promote a safe, inclusive campus culture. The program began with a welcome address by Dr. Shreyas Rajendra Hole, who introduced NSS and the significance of anti-ragging awareness. The first activity was an open-place skit titled "The Right Action," performed by students, portraying real-life scenarios where seniors and faculty intervened to foster a respectful and ethical environment. The skit effectively highlighted the importance of mutual respect and the role of authority in preventing ragging.

Following this, an Anti-Ragging Awareness Presentation was conducted in classrooms, featuring PowerPoint slides and posters explaining anti-ragging laws, university policies, and consequences for violators. The interactive session encouraged student participation, discussions, and real-life scenario analysis. The event concluded with an Anti-Ragging Pledge, reinforcing students' commitment to a ragging-free campus. The initiative successfully raised awareness, promoted ethical behavior, and strengthened student-faculty collaboration to ensure a safe and inclusive academic environment.







Department Of CSE (Data Science)

The Department of Computer Science and Engineering (Data Science), in association with the IEEE Information Theory Society (ITS) Student Chapter, successfully organized IdeaVerse'25 on February 20, 2025. Held at the School of Engineering, the event aimed to foster innovation, creativity, and problem-solving by providing a dynamic platform for idea exchange among students, faculty, and industry experts.

The event was spearheaded by key organizers, including Dr. Shaila S G, Chairperson of the CSE (Data Science) Department, Dr. Pavan Kumar U, Faculty Advisor IEEE ITS Student Branch, and Prof. Prapti Bhattacharjee, Faculty Coordinator of the IEEE ITS Student Branch at DSU. Additional support came from Dr. Pushpa Mala S, IEEE Student Branch Counsellor, and Dr. Arun Balodi, Faculty Advisor of IEEE SPS and MTTS, DSU. The student committee, led by Nitin Prajwal R (Chair of IEEE ITS), along with Pavan Kumar G (Vice-Chair) and Janardhan KS (Secretary), played a crucial role in organizing and managing the event.

The event was honored by the presence of Dr. Kishore Kumar Pedapenki, Senior Member of IEEE and Associate Professor at Jain University, Bangalore, as the chief guest. His insightful address and expertise in technology and research greatly enriched the participants.

IdeaVerse'25 concluded on a high note, applauding the dedication of all participants and inspiring young minds to continue their journey in research and innovation. The event successfully fulfilled its mission of promoting technological advancement and collaborative problem-solving.

Student Activities

Mr. Nithesh G (ENG22CS0112), 5th semester CSE student, successfully completed an online 20 hours AWS Academy Graduate – AWS Academy Cloud Foundations certificate during 12th February 2025.

Ms. Anitha N. (ENG21PCS02), Research scholar, Department of Computer Science & Engineering, under the guidance of Dr. Rajesh T M, Associate Professor, completed her Ph.D. Defence VIVA-VOCE entitled “An Automated Framework for Detection and Classification of Pulmonary Diseases in CT Scan Images” on Friday, 21st February 2025, from 10.00 AM to 11.00 PM in the CSE lab-514, SOE, DSU, Harohalli, Bangalore-562112.

Mr. Manoj S (ENG21CS0222), Mr. Kiran Gangoor (ENG21CS0189), Ms. Harshita S (ENG21CS0154), 8th Semester CSE Students, Dr. Girisha G S, Professor, Dr. George Fernandez I, Associate Professor, Prof. Pooja Shree H R, Assistant Professor, Department of CSE, has published an Indian patent with the title “Flame Watcher: Intelligent Gas Leak and Automatic Shutoff System” with the applicant name “Dayananda Sagar University”, during 21st February 2025.

Mr.Anirudh Sukesh has successfully completed the CC Domain 5: Security Operations certification on February 18, 2025. This accomplishment reflects his expertise in security operations, threat monitoring, and incident response, essential for maintaining a robust cyber security framework.

Mr.Anirudh N.S(ENG21CY0007) has successfully completed the "AI for All: From Basics to GenAI Practice" course in January 2025. This achievement showcases Anirudh’s dedication to mastering both foundational AI concepts and the latest advancements in Generative AI.

Mr. Jaice Joseph (ENG21CT0011), Mr. Hemal (ENG21CT0009), Mr. Krutharth (ENG21CT0016), Mr. Shashank Hegde (ENG21CT0036) and Prof. Ramandeep Kaur, Assistant Professor published a research article titled “Advancing Medical Imaging with AR: A Survey on transforming 2D images into immersive 3D Models” in GRENZE International Journal of Engineering and Technology in Feb 20. 2025.

Mr. Sohan (ENG21CT0037), Mr. Likith (ENG21CT0019), Mr. Mallikarjun (ENG21CT0012), Mr. Kaviyarasu (ENG22CT1001) and Prof. Yashaswini, Assistant Professor published a research article titled “Enhanced CNN and Federated Learning Algorithm for Secure and Precise Dermatological diagnosis” in GRENZE International Journal of Engineering and Technology in Feb 20. 2025.

Enhanced CNN and Federated Learning Algorithm for Secure and Precise Dermatological Diagnosis

SCHOOL OF ENGINEERING

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