DAYANANDA SAGAR UNIVERSITY
SCHOOL OF ENGINEERING

JULY-DECEMBER 2025
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ELECTROCLIPS

PRESENTED BY

ELECTROBLITZ CLUB

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

THE BIANNUAL NEWSLETTER OF ELECTRONICS

Main Campus
DAYANANDA SAGAR UNIVERSITY
SCHOOL OF ENGINEERING
DEVARAKAGGALAHALLI, HARDHALLI
KANAKAPURA ROAD, RAMANAGARA - DISTRICT, KARNATAKA - 562112

ABOUT THE DEPARTMENT

Dayananda Sagar University, School of Engineering started with the Electronics and Communication Engineering (ECE) Department in the year 2015. As a unit of excellence, the Department is well committed to impart the knowledge with highly qualified and well specialized faculty in the vistas of Electronics and Communication. The department has well established infrastructure and innovative labs put in place to facilitate the first and experience to students, for its academic and research programs. It runs four programs namely UG, PG with specialization of Embedded systems, B.Voc in Mechatronics and Doctoral degree. The department has collaborated with NTTF to offer the Vocational degree. This program enables the graduating students to accept a professional career which demands very high-level industry relevant skills. An exclusive BOSCH REXROTH lab is integrated into the curriculum and students can conduct automation projects. The industry sponsored Analog Devices Lab also provides students with opportunities to conduct research in the Communication Domain. The department faculty have patents and sponsored research projects funded by various Government funding agencies.

VISION

"To create innovative Engineers and Entrepreneurs with technological excellence, professional commitment and social responsibility for serving national and global needs."

MISSION

- Inculcate Academic Excellence through innovative teaching and learning processes and espousing appropriate pedagogical parameters.
- Reinforce the Students with desired technical aptitude, entrepreneurial and leadership skill sets enabling them to face the challenges of globalization and technological sophistication.
- Initiation with understanding the psychology of students, socio-cultural aspects of the bidirectional learners, vitality of interdisciplinary approach, value addition through interactive and collaborative learning. This is followed by systematic and sequential implementation of syllabus upgradations on par with industrial revolution.

Program Educational Objectives (PEOs) - UG

- Our Graduates will have in-depth knowledge of Electronics and Communication Engineering with promising professional careers in private and public sector or higher education.
- Our Graduates will be successful in solving Engineering Problems with innovative ideas and acquire managerial skills for desired outcomes.
- Our Graduates will have the motivation for perennial learning and progress their careers by inculcating interpersonal, leadership and social skills.
- Our Graduates will be active members for catering to the society locally and globally with Ethics and Integrity

Program Educational Objectives (PEOs) - PG

- Analyze and formulate suitable Electronic Design Automation (EDA) to solve real world problems in the Embedded Systems domain to design innovative products and systems
- Develop managerial skills and relevant techniques in the disciplines of Embedded Systems that include safety and sustainability, and become a successful professional or entrepreneur in the sector.
- Pursue a career in Embedded Systems research by selfteaching and self-directed research on cutting-edge technology

Program Educational Objectives (PEOs) - B.Voc

- Our Graduates will have in-depth knowledge of Mechatronics (B.VoC) with promising professional careers in private and public sector or higher education.
- Our Graduates will be successful in solving Engineering Problems with innovative ideas and acquire managerial skills for desired outcomes.
- Our Graduates will have the motivation for perennial learning and progress their careers by inculcating interpersonal, leadership and social skills.

Program Specific Outcome (PSO) - UG

- Apply the knowledge of Electronics and Communication to solve Engineering Problems in various domains of Engineering Sciences.
- Adopting analytical skills and complementing the cross-cutting technology to arrive at optimum solutions for Engineering Problems.
- Adaptability to dynamic work environment to address the societal needs with ethical approach.

Program Specific Outcome (PSO) - PG

- Develop skills in Embedded Systems, Design, Testing, Verification, and prototyping with a focus on applications.
- Integrate numerous subsystems to create a System On Chip, enhance its performance, and excel in Embedded domain-related industries.
- Apply use contemporary design tools for efficient product development.

Program Specific Outcome (PSO) - B.Voc

- Apply the knowledge of Mechatronics to solve Engineering Problems in various domains of Engineering Sciences.
- Adopting analytical skills and complementing the cross-cutting technology to arrive at optimum solutions for Engineering Problems.
- Adaptability to dynamic work environment to address the societal needs with ethical approach.

DEAN'S DESK

Dr. Udaya Kumar Reddy K R

I am delighted that the Department of Electronics and Communication Engineering is bringing out the magazine that can provide wonderful insights for students and faculty fraternity. A lot has been happening in Electronics Sciences over the years, and one of the significant changes involves this newsletter. Our graduate students are doing amazing things in many different areas in different ways . In the current issue, you'll meet some remarkable students and faculty who are making a difference in the technical aspects and otherwise. we are hoping to build this endowment with your support, to afford even more opportunities for students to take part in this important component of their graduate education, I hope this magazine provides the reader a wonderful insight and i thank the editorial team for their wonderful effort in bringing out this masterpiece.

WISH YOU ALL THE BEST.

CHAIRPERSON'S DESK

Dr. Arun Balodi

Dear All,

I hope this message finds you well and in good spirits. As we embark on another exciting year filled with opportunities and challenges, I wanted to take a moment to connect with each one of you. The Electronics and Communication Engineering Department has always been a vibrant community of passionate individuals dedicated to advancing knowledge, pushing boundaries, and contributing to the ever-evolving field of Electronics and Communication Engineering. Our collective efforts have resulted in numerous achievements, accolades, and a reputation for excellence. Firstly, I would like to express my gratitude to our dedicated faculty, passionate students, and supportive staff for their continued commitment to excellence in teaching, research, and innovation. Your collective efforts have positioned our department as a leader in advancing cutting-edge technologies and shaping the future of Electronics and Communication Engineering.In the spirit of fostering a sense of community and celebrating our achievements, I am pleased to announce the upcoming release of the Electronics and Communication Engineering Department Magazine. This publication aims to showcase the remarkable work, accomplishments, and stories within our department. I encourage you all to actively engage in departmental activities, research initiatives, and various events that will be organized throughout the year. Your unique perspectives and skills contribute significantly to the dynamic and enriching environment that defines our department T Your dedication and passion are the driving forces behind our success. I am confident that, together, we will continue to excel and make lasting contributions to the world of Electronics and Communication Engineering. “The focus of the department is to provide a better campus-based educational experience to the students for developing their learning interest and critical thinking to increase competencies in them."

EDITORIAL MESSAGE

Spark Ignition: The Unwritten Code of Our Community

Dear ECE family,
As we navigate the ever-changing landscape of technology and innovation, it's easy to get lost in the noise. But amidst the hum of circuit boards and the glow of succes, there's a thread that weaves us together, our passions for electronics.

Electroclips is more than just a magazine; it's a spark plug for our community. It's where stories meet innovation, where dreams become reality, and where friendships are forged. Every issue is a snapshot of what makes us tick, a testament to the diversity of talents, perspectives, and backgrounds that make ECE so vibrant.

We're not just talking about achievements; we're talking about experiences. We're talking about late-night hackathons, project triumphs, and failures turned into lessons learned. We're talking about students who've dared to dream big, staff who've mentored with heart, and alumni who have paved the way for those who come next.

This magazine is a time capsule of our collective spirit – one that's fueled by curiosity, creativity, and a willingness to learn. By contributing your stories, ideas, and talents to Electroclips, you're not just writing history; you're creating it.

So, let's spark some ignition in our community! Let's share our passions, showcase our work, and celebrate each other's successes. Together, we can create something truly remarkable – a magazine that embodies the essence of ECE and inspires others to join us on this incredible journey.

Join us on this spark-filled adventure!

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DEPARTMENT EVENTS

TWO-DAYS INTERNATIONAL LEVEL PROTOTHON TECHNOCOGNITION-25

Technocognition'25, a Inter National-Level Protothon organized by Dayananda Sagar University, brought together young innovators from across India for an intensive 36-hours of creativity, collaboration, and hands-on learning. Aligned with the Sustainable Development Goals, the event provided a dynamic platform for students to ideate, design, and develop technology-driven solutions addressing real-world challenges. With expert mentorship from academia and industry, international academic collaboration, and enthusiastic student participation, Technocognition'25 successfully fostered innovation, interdisciplinary teamwork, and practical problem-solving in a highly engaging and professional environment.

Objectives:

- To promote hands-on, prototype-based learning through real-time problem solving and innovation.
- To encourage students to develop sustainable and technology-driven solutions aligned with the Sustainable Development Goals (SDGs).
- To foster interdisciplinary collaboration among students from diverse engineering and academic backgrounds.
- To provide exposure to industry practices, emerging technologies, and real-world engineering challenges.
- To strengthen innovation, creativity, and entrepreneurial thinking among young engineers.
- To bridge the gap between academia, industry, and global research perspectives through expert mentorship and collaboration..


DAYANANDA SAGAR UNIVERSITY
SCHOOL OF ENGINEERING
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING & AEROSPACE ENGINEERING
PRESENTS
TECHNOCOGNITION '25
Inter-College 36 Hours International Level Protothon
< STARTUP - INNOVATE - INCUBATE >
Mr. Gopinath Rao
Dy.Director, MSME, Govt. of India
Indian Enterprise Development Service (IEDS)
PANELISTS
Mr. Sanjaya S
Scientist F
Centre For Artificial Intelligence and Robotics, Defence Research and Development Organisation (DRDO), India
Mr. Ramesh V RAM
CXo Portfolio of companies
Ex. Scientist - India space research organization (ISRO), India
Gp Capt AP Kannan (Retd)
Testing & Screening Head
Space, Aerospace and Defence Systems, Centum Electronics Ltd, India
Ms. Renuka Srinivasan
Director
3D EXPERIENCE Edu, Dassault Systems India
JURY MEMBERS
Dr. Riyaz A Rahiman
Senior Application Engineer
MathWorks products at CoreEL Technologies, Bangalore
Ms. Pramitha Ramaprakash
Founder & CEO
Transcend Satellite Technology, India
Mr. Nikhil Riyaz
Founder and Director
HEXEIA (HRAD Technologies Pvt. Ltd.), India
Mr. Harshith Kulkarni
Senior Software Engineer
Tech Mahindra-Google Client
Mr. Abhishek
Design Verification Engineer
Data center & Energy, Analog DeviceData center & Energy, An Device


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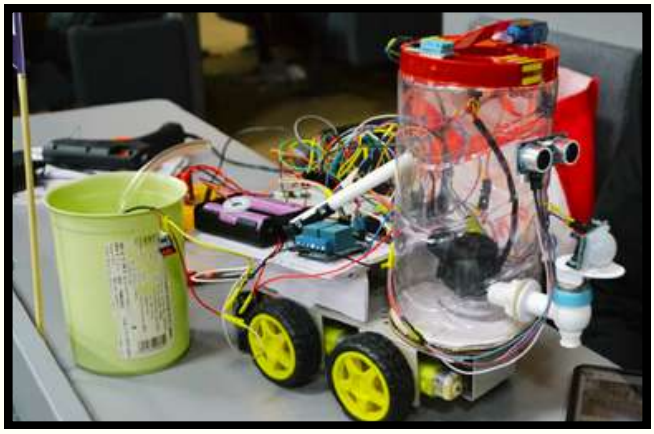
< STARTUP-INNOVATE - INCUBATE >
EDGE IMPULSE
Google Gemini
MathWorks
GeeksforGeeks
AIC-DSU Innovation Foundation
Sagar Hospitals
DERBI FOUNDATION
MIT Square
HackCulture
Delta
MAVEN SILICON
Centre of Excellence in Semicon
University of Cumbria
IEEE BANGALORE SECTION
IEEE Signal Processing Society
CEDA

Highlights:

- National-level 36-hour protothon with participation from 70 teams and over 210 students across India.
- Event focused on developing innovative solutions aligned with the Sustainable Development Goals (SDGs).
- Collaboration with the University of Cumbria, UK, bringing international academic perspectives to the event.
- Insightful inaugural ceremony with distinguished dignitaries from academia, industry, and research organizations.
- Engaging panel discussion featuring experts from startups, MSMEs, DRDO, ISRO, and leading technology companies.
- Intensive hands-on prototype development involving electronics, coding, system integration, and design thinking.
- Continuous mentorship and technical guidance from faculty, industry professionals, and research experts.
- Overnight soldering and model development sessions highlighting student dedication and teamwork.
- Industry review and evaluation by experts from Haysis, MathWorks, DRDO, and other reputed organizations.
- Rigorous evaluation based on innovation, feasibility, real-world relevance, and prototype performance.
- Prize pool of ₹3,00,000+ along with Maven Silicon course vouchers, certificates, and exclusive goodies.
- Successful platform fostering innovation, collaboration, and real-world problem-solving among young engineers.



Conclusion :

Technocognition'25 concluded as a highly successful and impactful protothon, inspiring students to transform ideas into functional prototypes through teamwork and innovation. The event strengthened industry academia collaboration, provided valuable mentorship, and reinforced the importance of practical learning in engineering education. By empowering students to address societal challenges through technology, Technocognition'25 set a strong foundation for future innovation-driven initiatives

1st Prize :*QUANTUM CREW*, B.Tech,
Simats Engineering College, Chennai

2nd Prize :*BLACK OPS*, B.Tech,
SNS College of Technology, Coimbatore

3rd Prize :*SKY HAWK*, B.Tech,
Dayananda Sagar University, Bangalore

1st Appreciation Award: *Laser Safai*, B.Tech, Adichunchanagiri Institute of Technology, Chikkamagaluru

2nd Appreciation Award: *Stark*, B.Tech, SJCIT, Chikkaballapur

Appreciation Award: *V3*, B.Tech, Dayananda Sagar University, Bangalore

Appreciation Award: *Ignitron* , B.Tech,
Dayananda Sagar University, Bangalore

Appreciation Award: *3 Freaks* , B.Tech,
R V College of Engineering, Bengaluru

Appreciation Award: *SkyYantra*, B.Tech,
Dayananda Sagar University, Bangalore

Appreciation Award: *Visqsk*, B.Tech,
BMS College of Engineering, Bengaluru

FACULTY CO-ORDINATOR :
Dr. DIVYASHREE H B, ASSISTANT PROFESSOR, ECE, DSU

TECHNICAL TALK ON AI IN DRUG DISCOVERY

BY DR. ARVIND RAO

The Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, organized a technical talk on “Artificial Intelligence in Drug Discovery: Bridging High-Content Screening to Target Discovery” on 9 July 2025. The session was delivered by Dr. Arvind Rao, Professor of Computational Medicine and Bioinformatics, University of Michigan, Ann Arbor. The talk highlighted the growing role of artificial intelligence in accelerating biomedical research and drug discovery, and attracted active participation from students and faculty across disciplines.

Objectives:

- To create awareness about the application of artificial intelligence in modern drug discovery.
- To introduce interdisciplinary research approaches combining electronics, AI, and biomedical sciences.
- To highlight practical AI techniques used in high-content screening and target identification.
- To encourage students and researchers to explore AI-based tools in experimental workflows.
- To bridge the gap between computational methods and real-world biomedical applications.

Conclusion :

The technical talk provided valuable insights into the transformative role of artificial intelligence in drug discovery and biomedical research. Dr. Arvind Rao's session effectively bridged computational techniques with practical applications, inspiring participants to explore interdisciplinary approaches and adopt AI-driven methodologies in research. The event successfully enhanced awareness and fostered academic interest in emerging technologies among students and faculty.

CONVENERS :

Dr. ARUN BALODI – CHAIRMAN, Dept of ECE, DSU

Dr. PUSHPA MALA – IEEE DSU Branch Counsellor

VALUE-ADDED COURSE ON DIGITAL SYSTEM DESIGN USING FPGA FOR AI/ML APPLICATIONS

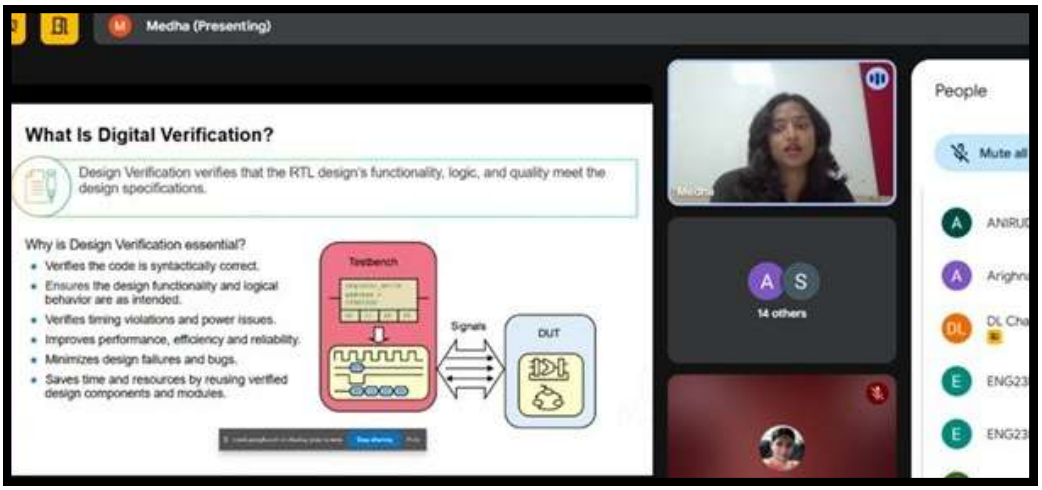
The Department of Electronics and Communication Engineering, Dayananda Sagar University, organized a 30-hour value-added course on "Digital System Design using FPGA for AI/ML Algorithms" from 5th to 9th August 2025. The course aimed to equip students with practical knowledge of FPGA-based digital design and its application in AI/ML systems through hands-on sessions and expert-led lectures using industry-standard tools.

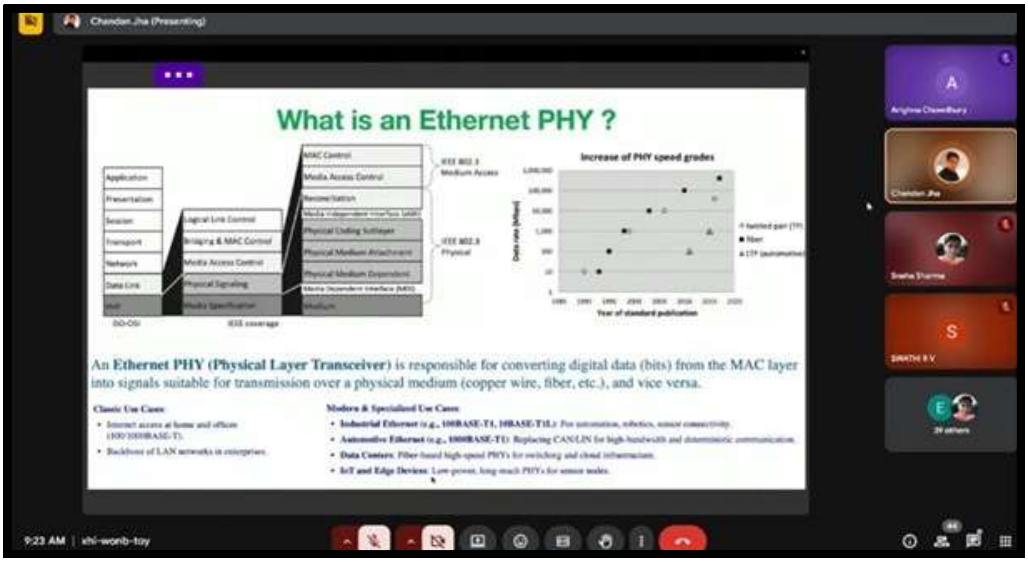
Objectives:

- To introduce students to FPGA-based digital system design for AI/ML applications.
- To provide hands-on exposure to Verilog modeling, Vivado HLS, and FPGA development workflows.
- To familiarize students with ASIC implementation concepts, STA, CDC, and interfacing protocols.
- To enhance awareness of FPGA-friendly AI/ML algorithms and energy-efficient system design.
- To bridge academic learning with industry practices through expert and alumni interactions.

Conclusion :

The technical talk provided valuable insights into the transformative role of artificial intelligence in drug discovery and biomedical research. Dr. Arvind Rao's session effectively bridged computational techniques with practical applications, inspiring participants to explore interdisciplinary approaches and adopt AI-driven methodologies in research. The event successfully enhanced awareness and fostered academic interest in emerging technologies among students and faculty.





NATIONAL SPACE DAY 2025 AT DAYANANDA SAGAR UNIVERSITY

Dayananda Sagar University (DSU) celebrated National Space Day 2025 on 29–30 August 2025, commemorating the second anniversary of India's landmark Chandrayaan-3 lunar landing. The event was jointly organized by the Departments of Aerospace Engineering (ASE), Electronics and Communication Engineering (ECE), and the Centre for Space Science and Technology (CSST). The celebration aimed to promote awareness, innovation, and academic engagement in the field of space science and technology.

Objectives:

- To commemorate India's successful Chandrayaan-3 mission and its impact on space exploration.
- To promote awareness of space science, satellite technology, and deep-space missions.
- To provide a platform for students to interact with ISRO experts and space scientists.
- To encourage innovation and problem-solving through hands-on activities and hackathons.
- To inspire students to pursue careers and research in space technology and allied domains

Highlights:

- Exposure to the global operations and product portfolio of Bosch Rexroth through an introductory session.
- Detailed safety orientation emphasizing PPE usage, emergency procedures, and workplace discipline.
- Insight into high-tension power distribution systems and centralized power house operations.
- Understanding of backup power management through diesel generator systems and load-sharing mechanisms.
- Observation of advanced grounding and safety infrastructure for equipment and personnel protection.
- Visit to endurance and testing facilities including performance, pulsation, and functional testing units.
- Practical understanding of quality assurance through rigorous testing and validation procedures.
- Tour of advanced manufacturing and processing units such as gear shaping, grinding, and finishing sections.
- Exposure to assembly, leak testing, torquing, and final inspection processes.
- Understanding the implementation of the Bosch Production System (BPS) and lean manufacturing principles.
- Interaction with industry professionals and engineers, gaining real-time industrial insights.
- Overall enhancement of technical knowledge and awareness of industrial safety and quality standards.

Conclusion:

National Space Day 2025 at DSU successfully celebrated India's achievements in space exploration while fostering innovation, collaboration, and scientific curiosity among students. Through expert interactions, student-led activities, and the Bhartiya Antriksh Hackathon, the event inspired young minds to contribute to India's growing space ecosystem and reinforced DSU's commitment to excellence in space science and technology education.

CONVENERS :

Dr. NAGARAJA - CHAIRMAN, Dept of ASE, DSU
Dr. ARUN BALODI - CHAIRMAN , Dept of ECE , DSU
Dr. HARIHARAN VK - CSST

FACULTY CO-ORDINATOR :

Dr. PRASHANTHA KUMAR, ASSOCIATE PROFESSOR, ASE, DSU
Dr. DIVYASHREE H B, ASSISTANT PROFESSOR, ECE, DSU
Dr. SRIPAD KULKARNI, ASSISTANT PROFESSOR, ASE, DSU

HANDS-ON WORKSHOP ON DATA STRUCTURES AND ALGORITHMS (DSA)

The Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, in association with the Electroblitz Club and GeeksforGeeks, organized a hands-on workshop on "Data Structures and Algorithms (DSA)" on October 16, 2025. The session was conducted by Mr. Soumyadeep Ghosh, Technical Mentor at GeeksforGeeks, one of India's leading platforms for computer science education. The workshop focused on strengthening students' programming foundations and enhancing their problem-solving skills through practical learning.

Objectives:

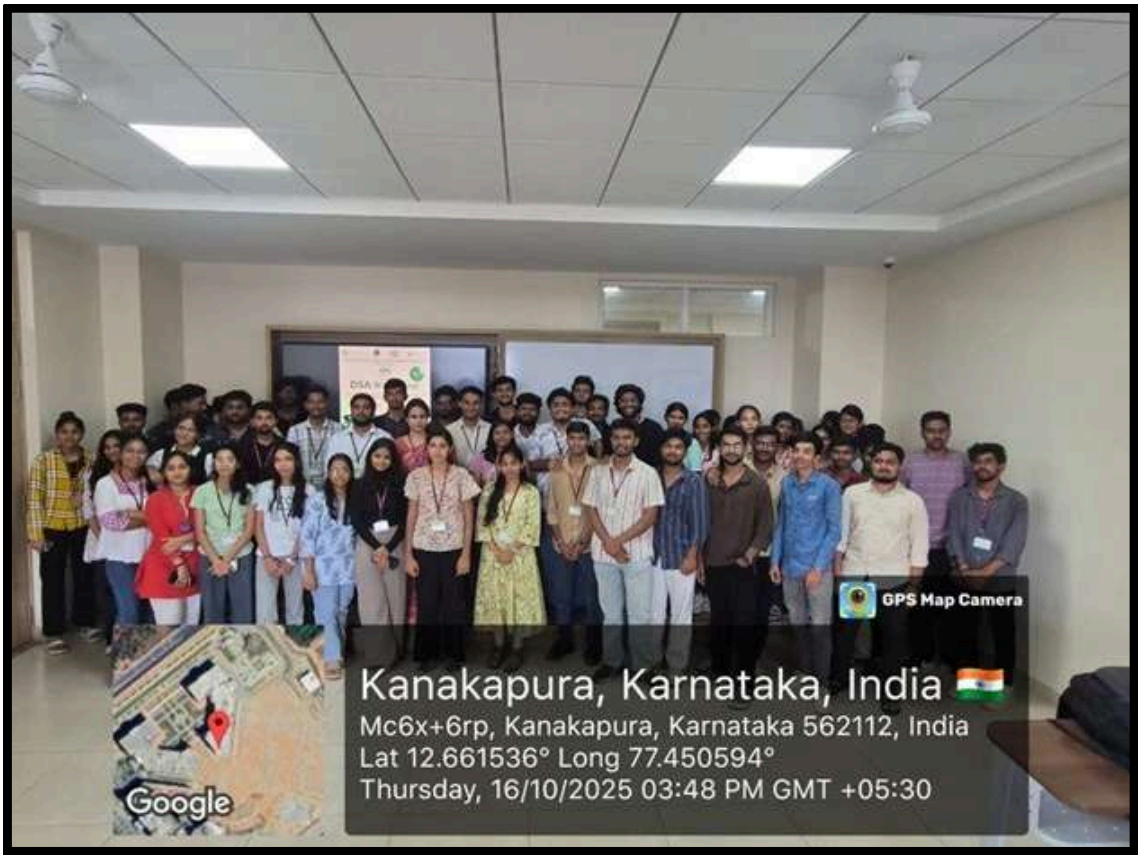
- To strengthen students' understanding of core Data Structures and Algorithms.
- To bridge the gap between theoretical concepts and real-world programming applications.
- To enhance logical thinking and problem-solving abilities among students.
- To familiarize students with algorithmic concepts relevant to technical interviews and competitive programming.
- To encourage continuous practice and learning in coding and software development.

Highlights:

- Expert-Led Session: The workshop was led by an experienced technical mentor from GeeksforGeeks.
- Comprehensive Coverage: Key topics such as arrays, linked lists, stacks, queues, recursion, sorting, searching, and complexity analysis were discussed.
- Live Coding Demonstrations: Hands-on coding sessions and interactive exercises improved conceptual clarity.
- Student Engagement: Participants actively interacted and clarified doubts during the session.
- Career Relevance: Emphasis was laid on the importance of DSA in technical interviews, software development, and competitive programming.

Conclusion:

The hands-on workshop on Data Structures and Algorithms proved to be highly beneficial for the participants, offering practical exposure and deeper conceptual understanding. The interactive teaching approach and real-world insights motivated students to strengthen their coding skills and prepare for industry demands. The event successfully reinforced the department's commitment to nurturing technically competent and industry-ready engineering graduates.



FACULTY CO-ORDINATOR :
Dr. DIVYASHREE H B, ASSISTANT PROFESSOR, ECE, DSU

WORKSHOP ON
"FPGA AS DIGITAL SIGNAL PROCESSING USING VIVADO HLS"

The Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, organized a one-day workshop titled "FPGA as Digital Signal Processing Using Vivado HLS" on October 25, 2025. The workshop was convened by Dr. Arun Balodi, Professor and Chairman, Department of ECE, and coordinated by Dr. Shirshendu Roy and Mr. Srinivas Ramavath, Assistant Professors, ECE. The program aimed to introduce students to High-Level Synthesis (HLS) techniques for implementing Digital Signal Processing (DSP) algorithms on FPGA platforms.

Objectives:

- To provide a foundational understanding of FPGA architecture and High-Level Synthesis.
- To demonstrate DSP algorithm modeling using C/C++ for FPGA implementation.
- To familiarize participants with Vivado HLS for rapid hardware prototyping.
- To enhance practical skills in designing, verifying, and optimizing FPGA-based DSP systems.
- To bridge the gap between algorithm development and real-time hardware execution.

Highlights:

- Expert Coordination: The workshop was led by experienced faculty members from the ECE Department.
- Technical Coverage: Topics included FPGA fundamentals, DSP algorithms such as filtering and FFT, and hardware mapping using Vivado HLS.
- Hands-on Sessions: Live demonstrations and practical exercises enabled real-time understanding of the HLS workflow.
- Toolchain Exposure: Participants gained insights into debugging techniques and performance optimization in FPGA design.
- Student Engagement: Interactive sessions encouraged active participation and conceptual clarity.

Conclusion:

The workshop successfully enhanced participants' understanding of FPGA-based Digital Signal Processing using Vivado HLS. Through hands-on learning and expert guidance, students gained practical exposure to modern FPGA design methodologies and DSP implementation techniques. The program effectively supported skill development, innovation, and technical excellence, aligning with Dayananda Sagar University's mission of delivering industry-relevant engineering education.

FACULTY CO-ORDINATOR :
DR.SHIRSHENDU ROY , ASSISTANT PROFESSOR, ECE, DSU

INDUSTRIAL VISIT TO BOSCH REXROTH, HEJJALA

As part of the academic curriculum and to gain practical exposure to contemporary industrial practices, an industrial visit to Bosch Rexroth, Hejjala was organized by the Department of Electronics and Communication Engineering, Dayananda Sagar University. Bosch Rexroth is a globally recognized leader in drive and control technologies, renowned for its precision engineering, innovation-driven culture, and stringent quality standards.

The primary objective of this visit was to understand the operational aspects of large-scale manufacturing industries, including power distribution systems, endurance and testing laboratories, manufacturing processes, and the safety protocols followed in an industrial environment.

Objectives:

- To gain practical exposure to modern industrial manufacturing and processing practices.
- To understand the functioning of power and utility infrastructure in a large-scale industrial setup.
- To observe safety standards and protocols followed in an industrial environment.
- To study endurance, performance, and reliability testing methods used in industry.
- To familiarize students with advanced manufacturing, assembly, and inspection processes.
- To bridge the gap between theoretical knowledge and real-world industrial application.

Highlights:

- Exposure to the global operations and product portfolio of Bosch Rexroth through an introductory session.
- Detailed safety orientation emphasizing PPE usage, emergency procedures, and workplace discipline.
- Insight into high-tension power distribution systems and centralized power house operations.
- Understanding of backup power management through diesel generator systems and load-sharing mechanisms.
- Observation of advanced grounding and safety infrastructure for equipment and personnel protection.
- Visit to endurance and testing facilities including performance, pulsation, and functional testing units.
- Practical understanding of quality assurance through rigorous testing and validation procedures.
- Tour of advanced manufacturing and processing units such as gear shaping, grinding, and finishing sections.
- Exposure to assembly, leak testing, torquing, and final inspection processes.
- Understanding the implementation of the Bosch Production System (BPS) and lean manufacturing principles.
- Interaction with industry professionals and engineers, gaining real-time industrial insights.
- Overall enhancement of technical knowledge and awareness of industrial safety and quality standards.

Conclusion :

The industrial visit to Bosch Rexroth, Hejjala, was a highly informative and enriching experience that provided valuable insights into modern industrial practices. The visit enabled students to understand the practical application of theoretical concepts through exposure to advanced manufacturing processes, power and utility infrastructure, and comprehensive safety systems. Observing endurance and performance testing facilities highlighted the importance of quality assurance, reliability, and global standards in industrial production. The structured approach followed by Bosch Rexroth, including the Bosch Production System and strict safety protocols, emphasized efficiency, precision, and continuous improvement. Overall, the visit significantly enhanced our technical knowledge, industrial awareness, and motivation to apply these learnings in our academic and professional pursuits.

FACULTY CO-ORDINATOR :
Dr. DIVYASHREE H B, ASSISTANT PROFESSOR, ECE, DSU

FDP ON INNOVATIVE ANTENNA DESIGN

The Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University (DSU), in collaboration with the Centre for Training and Learning (CTL), NIT Warangal, organized a 5-day online Faculty Development Program (FDP) titled "Innovative Antenna Design for Advanced Communication Technologies: From Concept to Implementation" from 08–12 December 2025. The FDP covered advanced topics including 5G/6G antenna systems, metamaterials, mm-wave and THz communication, MIMO and beam-steerable antennas, SIW and DRA antennas, and 3D-printed antenna technologies. Delivered by experts from IITs, NITs, DRDO, and industry, the program attracted 49 participants from across India. The sessions provided a strong blend of theoretical knowledge and practical insights, enabling participants to enhance teaching methodologies, explore new research directions, and foster academic collaboration in next-generation RF and antenna engineering.

FACULTY CO-ORDINATOR :
Dr. RAMESH AMUGOTHU, ASSISTANT PROFESSOR, ECE, DSU.

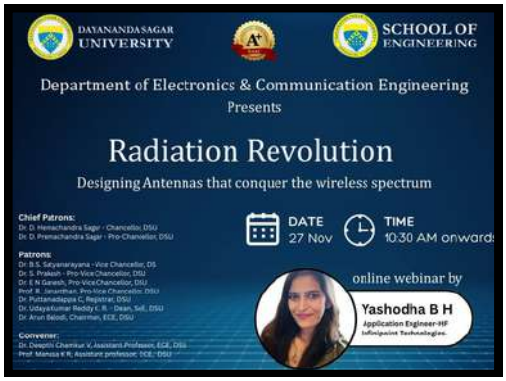
RADIATION REVOLUTION WEBINAR

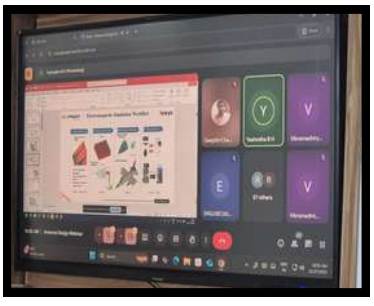
The Department of Electronics & Communication Engineering at Dayananda Sagar University (DSU) hosted an online webinar titled "Radiation Revolution: Designing Antennas that conquer the wireless spectrum". Key Resource Person was Yashodha B H, Application Engineer-HF at Infinipoint Technologies..

The webinar provided a comprehensive overview of the critical role antennas play in modern communication.The session targeted engineering students to bridge the gap between theoretical electromagnetic theory and industrial antenna design. The webinar explored cutting-edge topics such as 5G technology, massive MIMO (MaMi), and millimeter-wave (mm-wave) bands. Key design challenges, including size constraints, complexity, and beam-steering capabilities, were discussed in detail.

Key Takeaways:

- Antenna Fundamentals: Understanding radiation patterns and spectrum efficiency.
- Industry Trends: Insight into how 5G increases data rates through advanced antenna systems.
- Practical Applications: Demonstration of multi-functional antenna solutions for 4G/5G handsets.
- Professional Development: Guidance on publishing research and patenting innovative antenna designs & application of high-frequency (HF) engineering principles in real-world product development.
- The event concluded with an interactive Q&A session, leaving students with a deeper understanding of wireless engineering. It successfully equipped participants with a professional perspective on antenna design and high-frequency applications.





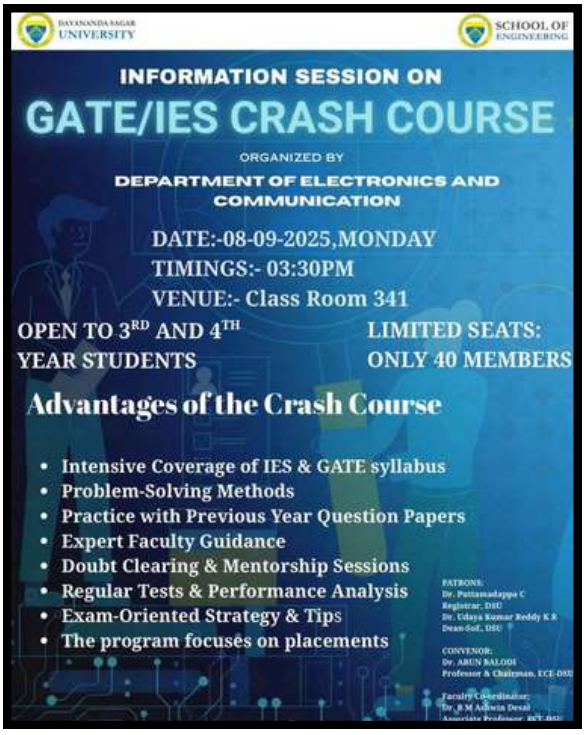
FACULTY CO-ORDINATOR :
DR. DEEPTHI CHAMKUR V, ASSISTANT PROFESSOR, ECE, DSU
MRS. MANASA K R, ASSISTANT PROFESSOR, ECE, DSU

GATE/IES CRASH COURSE

An information session on the GATE/IES Crash Course was organized by the Department of Electronics and Communication, School of Engineering, Dayananda Sagar University. The session was conducted to create awareness among 3rd and 4th year students about the benefits of the gate crash course.

Details about the course structure, syllabus coverage, problem-solving methods, and exam-oriented preparation were explained. The session also highlighted expert faculty guidance, regular tests, and doubt-clearing sessions. Overall, the program was informative and helpful for students planning to prepare for GATE/IES and placements.

- The session helped students understand the importance of early and focused preparation for GATE and IES exams.
- Students were informed about the course schedule, teaching methods, and evaluation process.
- The limited intake of students was highlighted to ensure personal attention and effective learning.
- The session motivated students to plan their career goals and exam preparation more clearly.
- Students actively participated and clarified their doubts during the interaction.
- The session concluded with guidance on how to enroll in the crash course.



FACULTY CO-ORDINATOR :
DR. B M ASHWIN DESAI, ASSOCIATE PROFESSOR, ECE, DSU

Teacher's Day

Happy

TEACHERS DAY

ELECTROCLIPS

THE BIANNUAL NEWSLETTER OF ELECTRONICS

ELECTROBLITZ EVENTS

ELECTROBLITZ CLUB

Electroblitz is a student techno-cultural club formed under the Dept. Of Electronics and Communication, with the motive of providing a platform for students to exhibit both academic and extra curricular skills. The activities of the club enhance their technical skills and personal development apart from academics

VISION

To excel in developing engineers, and techno-entrepreneurs through quality technical education, imbibing societal and ethical values by leveraging interdisciplinary research for sustainable solutions

MISSION

The Department of Electronics and Communication Engineering is committed to:

M1: Design and deliver contemporary Electronics and Communication Engineering curricula to offer quality technical education centered on experiential learning, ethical values, and leadership qualities.

M2: Inculcate interdisciplinary research and innovative culture in partnership with industries and premier institutions.

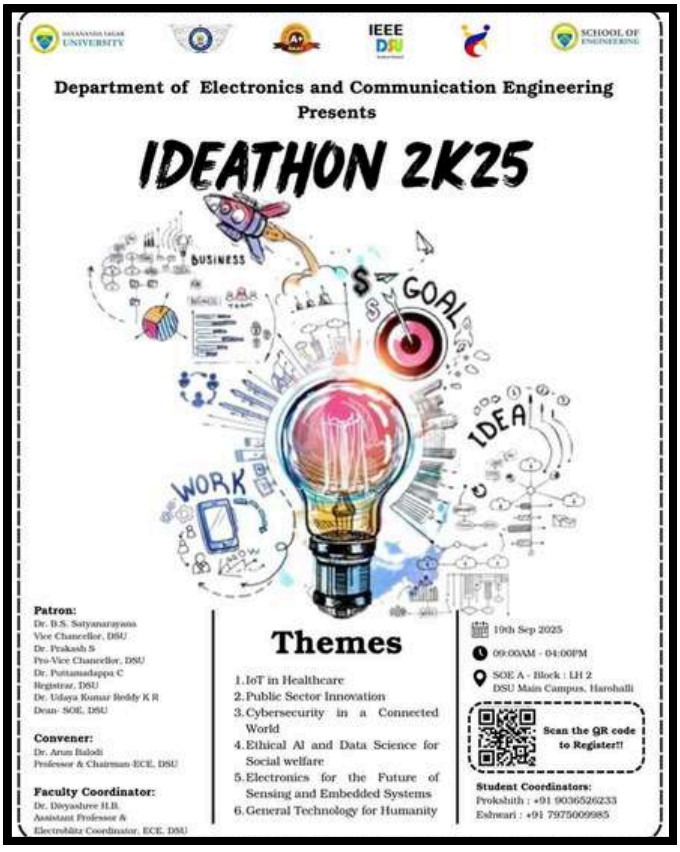
M3: Create engineers and techno-entrepreneurs to meet societal needs by upholding moral principles.

NATIONAL LEVEL IDEATHON'25 : WHERE INNOVATION MEETS IMPACT

Ideathon'25: The Ultimate Battle of Ideas was a flagship innovation-driven event organized by the Electroblitz Club in association with the Department of Electronics and Communication Engineering, Dayananda Sagar University. The event served as a dynamic platform for students from various institutions to present creative and technology-oriented solutions addressing real-world challenges. Held on 19 September 2025 at the Harohalli Campus, Ideathon'25 witnessed enthusiastic participation from over 200 students across 60+ teams, fostering an environment of critical thinking, collaboration, and innovation. The event celebrated originality, teamwork, and the spirit of technological advancement by encouraging young minds to ideate beyond conventional boundaries.

Objectives:

- To provide a platform for students to pitch innovative ideas addressing real-world challenges.
- To foster creativity, collaboration, and critical problem-solving skills among participants.
- To encourage students to think beyond conventional boundaries and develop impactful solutions.
- To showcase students' vision and ideas to faculty, peers, and industry experts.
- To inspire innovation and teamwork, motivating students to transform ideas into meaningful contributions for the future



Highlights:

- The event witnessed active participation from over 200 students forming more than 60 teams, representing various engineering institutions across the country.
- Ideathon'25 provided a competitive yet collaborative platform for students to present innovative solutions addressing real-world challenges.
- Participants showcased ideas across multiple domains, including electronics, sensing and embedded systems, public sector innovation, and technology for societal impact.
- An esteemed panel of jury members, comprising experienced faculty and industry professionals, ensured a fair and insightful evaluation process.
- The event encouraged the application of technical tools such as MATLAB, Arduino IDE, and Python-based simulation platforms for ideation and prototyping.
- The structured format of the event enhanced participants' critical thinking, analytical reasoning, and presentation skills.
- Outstanding teams were recognized and awarded for their originality, feasibility, and innovative approach.
- The event fostered interdisciplinary learning and teamwork, strengthening collaborative problem-solving abilities among participants.
- Efficient planning and execution by the student coordinators contributed to the smooth conduct and overall success of the event.
- Ideathon'25 significantly contributed to cultivating a culture of innovation, creativity, and entrepreneurial thinking within the academic community.

Conclusion :

National Level Ideathon'25 successfully achieved its objective of providing a dynamic platform for students to ideate, innovate, and present solutions to real-world challenges. The event fostered a spirit of creativity, critical thinking, and collaboration among participants while enabling meaningful interaction with experienced faculty and industry experts. Through innovative idea presentations, constructive evaluation, and recognition of outstanding contributions, Ideathon'25 highlighted the technical competence and visionary potential of young innovators. The collective efforts of the organizing team, jury members, faculty, and student coordinators ensured the smooth execution and overall success of the event. Ultimately, Ideathon'25 contributed significantly to nurturing a culture of innovation, teamwork, and forward-thinking problem-solving within the academic community.

1st Prize : *Team Stealth*, B.Tech,
SJB Institute of Technology, Bengaluru

2nd Prize : *Team Lifafa* , B.Tech,
Dayananda Sagar College of Engineering,
Bengaluru

3rd Prize : *Team Innovatrix* , B.Tech,
Velammal Engineering College, Chennai

FACULTY CO-ORDINATOR :
Dr. DIVYASHREE H B, ASSISTANT PROFESSOR, ECE, DSU

WORKSHOP ON "AI FOR DEVICES: EDGE IMPULSE"

Artificial Intelligence (AI) has become a key enabling technology in modern electronics, empowering devices to analyze data, learn patterns, and make intelligent decisions. Its integration with embedded and Internet of Things (IoT) systems has led to the development of smart and efficient solutions across various application domains. In this context, the Department of Electronics and Communication Engineering, Dayananda Sagar University, in association with the Electroblitz Club, organized a hands-on workshop titled "AI for Devices: Hands-On with Edge Impulse."

The workshop aimed to introduce students to the concept of Edge Artificial Intelligence (Edge AI), where data processing and inference are performed directly on hardware devices such as microcontrollers and sensors. This approach offers significant advantages over cloud-based AI, including reduced latency, enhanced data privacy, and optimized power consumption. Through expert guidance and practical demonstrations using the Edge Impulse platform, participants were exposed to the complete workflow of developing AI models, from data acquisition and training to deployment on embedded devices. The session effectively bridged the gap between theoretical knowledge and real-world implementation, enabling students to understand the practical relevance of AI in embedded systems

Objectives:

- To introduce the fundamentals of Artificial Intelligence and Edge AI in embedded systems.
- To familiarize students with the Edge Impulse platform for developing AI models on edge devices.
- To provide hands-on exposure to data collection, model training, and evaluation processes.
- To demonstrate the deployment of AI models on microcontrollers and IoT devices.
- To highlight real-world applications of Edge AI in various engineering domains.
- To encourage innovation and practical implementation of AI concepts in academic projects..

Conclusion :

The workshop "AI for Devices: Hands-On with Edge Impulse" was a successful and informative session that introduced participants to the fundamentals of Artificial Intelligence and Edge AI. Through practical demonstrations, students gained hands-on experience in developing and deploying AI models on embedded devices. The workshop effectively connected theoretical knowledge with real-world applications and motivated students to explore AI-based solutions in their academic and future professional endeavors.

FACULTY CO-ORDINATOR :
Dr. DIVYASHREE H B, ASSISTANT PROFESSOR, ECE, DSU

NAVRATRI CELEBRATION

The Department enthusiastically celebrated the auspicious festival of Navratri with a unique seven-day cultural observance, symbolizing devotion, positivity, and unity. Throughout the week, faculty members and students actively participated by dressing in seven different traditional colours, each representing a distinct day of Navratri and its spiritual significance.

This colourful initiative fostered a sense of cultural pride, inclusivity, and togetherness within the department. The celebration not only added vibrancy to the academic environment but also strengthened the bond between faculty and students, creating a joyful and harmonious atmosphere on campus.

SARASWATHI POOJA CELEBRATION

The Department of Electronics and Communication Engineering solemnly celebrated Saraswathi Pooja, organized by the Electrobitz Club, in reverence to Goddess Saraswathi, the divine embodiment of knowledge, wisdom, and learning. The event witnessed active participation from faculty members and students, who came together to seek blessings for academic excellence, intellectual growth, and innovation. The serene and devotional atmosphere of the celebration reinforced the department's commitment to the pursuit of knowledge, respect for education, and the preservation of cultural and traditional values within the academic environment.

ELECTROCLIPS

THE BIANNUAL NEWSLETTER OF ELECTRONICS

STUDENTS ACHIEVEMENTS

CONTRIBUTION TO GOOGLE SUMMER OF CODE (GSOC)

We are delighted to share that Dev Sharma, a student of the Electronics and Communication Engineering Department, has successfully contributed to the Google Summer of Code (GSoC) by completing a 90-hour Intermediate Level Project. This achievement marks his active participation in a globally recognized open-source initiative and reflects his strong technical foundation and problem-solving skills.

This notable accomplishment highlights his dedication, innovation, and technical excellence in contributing to global open-source communities. His participation demonstrates a strong commitment to collaborative development and continuous learning. The department congratulates Dev Sharma on this outstanding achievement and wishes him continued success in his journey of learning and innovation.

PERPLEXITY CAMPUS PARTNER

We are delighted to announce that Dev Sharma, a B.Tech student from the Electronics and Communication Engineering (ECE) Department, has officially been selected as a Perplexity Campus Partner.

This partnership presents exciting opportunities to promote AI-powered learning, research, and innovation within the campus community. Through this role, Dev will help facilitate engaging workshops, events, and initiatives aimed at empowering students to effectively utilize advanced AI tools for academic and professional growth.We congratulate Dev Sharma on this achievement and look forward to the positive impact of this collaboration on our campus ecosystem

STUDENT INNOVATION AT SMART INDIA HACKATHON 2025

The Department proudly acknowledges the remarkable achievement of Team Zeta1, who represented the university at the Smart India Hackathon (SIH) 2025 held in New Delhi with their innovative project titled "ORTHOSENSE – Real-Time Pressure Measurement System for Orthotic Optimization." Developed in response to a problem statement issued by the Ministry of Social Justice & Empowerment (MoSJE), the project focuses on enhancing patient outcomes through continuous real-time foot pressure monitoring using adaptive sensors, AI-driven analysis, and self-adjusting actuators. The team successfully demonstrated a functional prototype, including pressure-mapping insoles and a well-structured exhibition setup, highlighting both technical depth and practical feasibility. The department expresses immense pride in the team for traveling to New Delhi and representing the college on a national platform, showcasing the institution's commitment to innovation, research excellence, and real-world problem solving.

दिल्ली, 12 दिसंबर, 2025 जागरण सिटी ग्रेटर नोएडा www.jagran.com

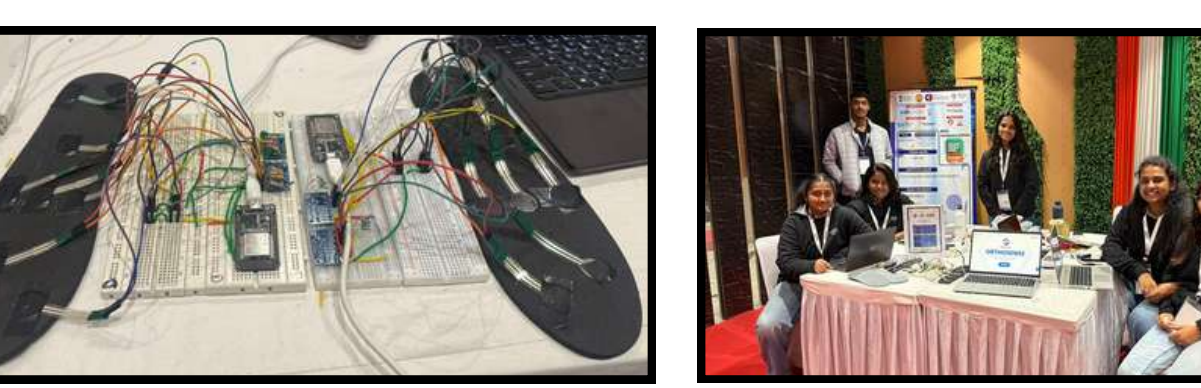
दिव्यांगों-सर्जरी के मरीजों व खिलाड़ियों के पैरों का संतुलन बनाए रखेगा आर्थोसेंस

• बेंगलुरु के रवानंद सागर विश्वविद्यालय की टीटा वन टीम ने तैयार किया है उपकरण

• पूरी तरह से स्वचालित उपकरण को जूते या चप्पल के सोल में किया जाएगा सेट

जूतों व चप्पल के सोल में लगेगा उपकरण

छह से 10 घंटे तक है बैट्री बैकअप



PLACEMENTS

Sl.No	USN	Name	Company	CTC (LPA)
1	ENG23EC1007	Sonam	ACMEGRADE	8
2	ENG22EC0016	S.Cindrella	Edyufi	7
3	ENG22EC0015	Chinmay Gowda Y R	Edyufi	7
4	ENG22EC0001	Aarthi Nayak Ullal	RedAnt Technologies	6
5	ENG22EC0074	Usha D K	Ascent Circuits	6
6	ENG22EC0064	Sneha v Biradar	Ascent Circuits	6
7	ENG22EC0065	Soujanya S N	Bharti Airtel Limited	5.5
8	ENG22EC0002	Adithya J	EInfochips	5
9	ENG22EC0010	Balachandra	EInfochips	5
10	ENG22EC0018	G Poojitha Reddy	EInfochips	5

PLACEMENTS

Sl.No	USN	Name	Company	CTC (LPA)
11	ENG22EC0020	Ganesh K	EInfochips	5
12	ENG22EC0061	Shreeraksha M.Nayak	EInfochips	5
13	ENG22EC0072	Urvashi Malik	EInfochips	5
14	ENG22EC0053	Sangeetha C	HALMA INDIA	4.8
15	ENG22EC1002	Rohan Raj	TASTEOFMOM	4.5
16	ENG22EC0075	Usharani R G	Capegemini	4.25
17	ENG22EC0052	Samrudhhi Gururaj Naik	LTIMindtree	4.05
18	ENG22EC0006	Anirudha	Aviotron Aerospace	3.8
19	ENG22EC0035	Md Imran	Aviotron Aerospace	3.8
20	ENG22EC0018	Aditi Devi Prasad	Edgeverve Systems	3.6

PLACEMENTS

Sl.No	USN	Name	Company	CTC (LPA)
21	ENG22EC0003	Sejal Gopal Patil	Edgeverve Systems	3.6
22	ENG22EC0020	Chinmay Gowda Y R	Infosys	3.6
23	ENG22EC0061	Gnana teja	Infosys	3.6
24	ENG22EC0072	Likhitha N	Infosys	3.6
25	ENG22EC0053	Nandhitha KS	Infosys	3.6
26	ENG22EC0064	Vikas S	Infosys	3.6

FACULTY ACHIEVEMENTS

DR. ARUN BALODI

Dr. Arun Balodi, Professor and Chairman, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, is proudly representing the Department of Electronics & Communication Engineering in dual leadership roles, serving as both a Track Chair and a Session Chair at this prestigious event.

The conference promises a dynamic exchange of ideas through cutting-edge research presentations, thought-provoking panel discussions, and cross-disciplinary collaboration opportunities. It also provides a valuable platform for networking with esteemed academicians, researchers, and industry experts.

With a strong emphasis on future-ready technologies and innovation-driven research, CONNECT 2025 serves as an ideal platform to explore emerging possibilities and advancements shaping the technologies of tomorrow.

Dr. Arun Balodi, Chairman of the Department of Electronics and Communication Engineering, Dayananda Sagar University, has successfully completed the "Foundations of AI" course under the GenAI Literacy Program, conducted by Library Connect Academy, Elsevier, on July 5, 2025. The program provided a comprehensive introduction to artificial intelligence, covering core concepts, ethical considerations, and real-world applications, and reflects Dr. Balodi's proactive commitment to strengthening AI literacy within academic and research environments. This achievement further aligns with the department's ongoing efforts to promote technological advancement, innovation, and academic excellence in emerging and future-ready domains.

Dr. Arun Balodi, Professor and Chairman, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, has been invited to serve on the Organizing Committee of the 3rd International Conference on Intelligent Computing and Robotics (ICICR 2026), a prestigious global event bringing together leading experts in artificial intelligence, robotics, and intelligent systems. His participation as a committee member underscores the department's continued commitment to global research engagement, academic excellence, and active involvement in international scholarly initiatives.

Dr. Arun Balodi, Professor and Head, Department of Electronics and Communication Engineering, Dayananda Sagar University, has officially joined the Editorial Board of Scientific Reports, a leading Q1 journal published by the Nature Portfolio. This prestigious appointment reflects Dr. Balodi's significant contributions to research and academia, as well as his continued commitment to advancing scientific excellence and high-impact scholarly work.

Dr. Arun Balodi, Professor and Chairman, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, participated in the One-Week Workshop on Innovation, Sustainability & Leadership (WISL) held from 14th to 18th July 2025. The program was organized by the IEEE Region 10 Adhoc Committee on Entrepreneurship & Innovation (ACEI) Ambassadors Team, in collaboration with the IEEE Delhi Section and WIE Delhi Section AG, as part of the IEEE Delhi Section Golden Jubilee celebrations.

The workshop featured insightful sessions delivered by thought leaders and experts in innovation, sustainable development, and leadership. It provided a dynamic platform to explore future-ready ideas, exchange perspectives, and engage with a diverse community of professionals and innovators across the IEEE network.

Dr. Arun Balodi expressed his sincere appreciation to the organizers for this valuable learning opportunity and looks forward to applying the knowledge and insights gained through the workshop in academic and research initiatives.

Dr. Arun Balodi, Professor and Chairman, Department of Electronics and Communication Engineering, Dayananda Sagar University, Bengaluru, was invited as a Distinguished Expert Speaker at the Faculty Development Programme (FDP) on Intelligent Systems and Emerging Technologies in Computing and Electronics (ISETCE–2025). This prestigious five-day online FDP was jointly organized by the School of Computer Science (SoCS), UPES Dehradun, and NIT Jamshedpur, and featured eminent speakers from across the country.

Dr. Arun Balodi delivered an expert session titled "AI-Powered Diagnostic Medical Imaging" on 21st July 2025, highlighting the transformative role of artificial intelligence in medical diagnostics. His talk emphasized recent innovations aimed at enhancing diagnostic accuracy and improving patient care outcomes, and sparked insightful discussions on the convergence of healthcare and intelligent systems.

The university extends its sincere appreciation to Dr. Arun Balodi for his valuable contribution and for representing Dayananda Sagar University on such a distinguished academic platform

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.

The FDP was organized by the IEEE RAS Bangalore Chapter in collaboration with the IEEE BGS Student Branch Chapter and hosted by BGS College of Engineering and Technology. Dr. Balodi delivered a session titled "Robotics in Healthcare", highlighting the role of AI-driven robotic systems in advancing medical diagnostics and treatment, and fostering meaningful discussions on emerging healthcare technologies.

BGS College of Engineering and Technology

IEEE RAS BANGALORE CHAPTER

in collaboration with

IEEE BGSCET STUDENT BRANCH CHAPTER

5 Days FDP on

AI Powered robotics in Industrial Automation Applications for Future Research

26th to 30th July 2025

Program Schedule

Day	Time	Resource Person	Topic
26/07/2025 Saturday (offline)	10am to 11 am	Inauguration	
	11.30 am to 1pm	**Dr. Arpitha Shankar** Associate Professor, GSSSIT	Introduction to Robotics and AI
	1pm to 3.30pm	**Mr. Kousik Sankar Ramasubramaniam** Founder, Svasthiya Technologies Pvt. Ltd. and Visiting Faculty, PES University	AI in Robotics
27/07/2025 Sunday (online)	11am to 1pm	**Dr. Ravichandran Kulkarni** Dean- R&D, Professor and Head, CSE- IC MIT, Mysuru	AI for Robotics and related Cybersecurity
	2pm to 3.30pm	**Mr. Srinivasa Chary** Co Founder – Director Belbird Technologies Pvt Ltd	Robotics and its Applications
28/07/2025 Monday (online)	11am to 1pm	**Dr. Arun Balodi** Chairman, ECE, DSU	Robotics in Healthcare
	2pm to 3.30pm	**Dr. Pramod Naik** Chairman, AI and Robotics Dept, DSU	AI Powered Collaborative Robots
29/07/2025 Tuesday (online)	11am to 1pm	**Dr. Mangala Gowri S G** Associate Professor, ECE Dept. SMVIT	Human Robot Collaboration
	2pm to 3.30pm	**Dr. Parkavi A** Associate Professor, Dept. of CSE MSRIT	Advanced AI algorithms
30/07/2025 Wednesday (offline)	10am to 11.30am	**Dr. Venkatarangan M J** Professor, IEEE RAS Past Chair, RAS Advisory Bangalore Chapter PES University	Understanding Robotic Configurations, Sensors, Actuators and their Applications
	11.30am to 1pm	Valedictory	

Dr. Arun Balodi, Chairman of the Department of Electronics and Communication Engineering, Dayananda Sagar University, participated in the 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 conference brought together distinguished experts and researchers from around the world

During the conference, Dr. Arun Balodi presented two research papers titled “Analysis of Different Deformation Shapes of Flexible Patch Antenna” (co-authored with Ayyala Kishore Ajay Kumar, Owais Ahmad Shah, and Anil Kumar) and “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 showcased significant advancements in antenna design and the application of AI-driven methodologies in space and defence domains. The university congratulates Dr. Balodi on this notable academic achievement.

Dr. Arun Balodi, Chairman of the Department of Electronics and Communication Engineering, Dayananda Sagar University, made significant contributions to the 11th International Conference on Electronics, Computing and Communication Technologies (IEEE CONECCT 2025), held from July 10–13, 2025, at Sterling's Mac Hotel, Bengaluru, and organized by the IEEE Bangalore Section.

At this prestigious conference, Dr. Arun Balodi served in multiple key roles, including Track Chair, overseeing the effective coordination of technical sessions; Session Chair, facilitating insightful discussions and knowledge exchange among researchers and experts; and Reviewer, ensuring the academic rigor and quality of submitted technical papers. His active involvement underscores his leadership and sustained engagement in advancing research and innovation in the field of electronics and communication technologies

Dr. Arun Balodi, Professor and Chairman, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, was awarded the "*Best Paper Presenter*" at the 3rd IEEE International Conference on Networks, Multimedia and Information Technology (NMITCON-2025), held on 1st–2nd August 2025 at Nitte Meenakshi Institute of Technology (NMIT), Bengaluru.


NITTE | NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY
Nitte University Campus, Bengaluru
IEEE NMITCON 3rd IEEE International Conference on Networks, Multimedia and Information Technology
Certificate of Appreciation
This is to certify that
Arun Balodi
Awarded the "BEST PAPER PRESENTER" for the Paper Entitled
Dual Mode Robotic Arm Control System: Voice and Gesture Integration
at the 3rd IEEE International Conference on Networks, Multimedia and Information Technology (NMITCON-2025) during 1st-2nd, August 2025 in Association with IEEE Bangalore Section. Organized by Nitte Meenakshi Institute of Technology, Bengaluru.
Dr. PARAMESHACHARI B D, Conference Chair, NMITCON, Professor & HoD, Dept. of ECE, NMIT
Dr. H C NAGARAJ, Principal, NMIT
Technical Co-Sponsor
Academic Partners

The award was conferred for his paper titled *"Dual Mode Robotic Arm Control System: Voice and Gesture Integration"*, recognized for its innovative concept and impactful presentation. Organized in association with the IEEE Bangalore Section, the conference witnessed participation from academicians, researchers, and industry experts from across the globe. This achievement underscores the department's commitment to excellence and its contributions to advancing cutting-edge technologies.

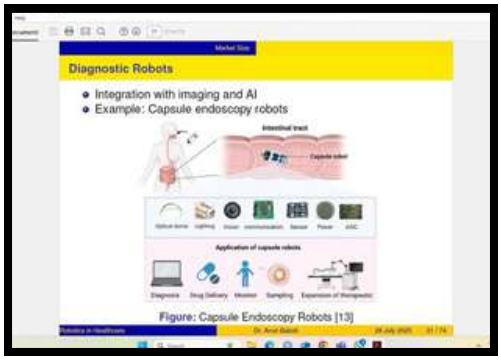
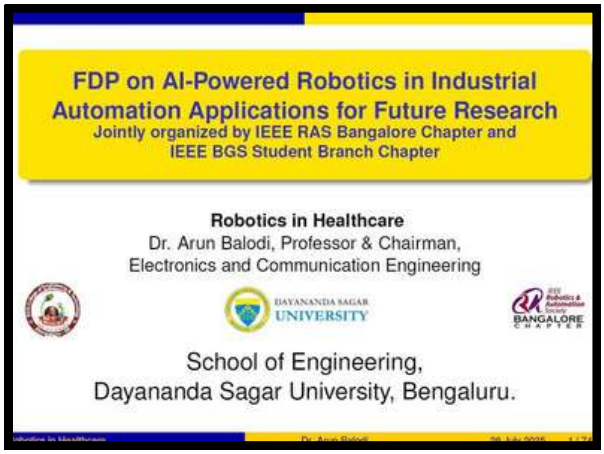

Diagnostic Robots
- Integration with imaging and AI
- Example: Capsule endoscopy robots

Figure: Capsule Endoscopy Robots [13]

Dr. Arun Balodi, Professor and Chair, Department of Electronics and Communication Engineering, Dayananda Sagar University, delivered an insightful session titled "Robotics in Healthcare" during the Faculty Development Program on AI-Powered Robotics in Industrial Automation Applications for Future Research, held on 28 July 2025. The program was co-organized by the IEEE RAS Bangalore Chapter and the IEEE BGS Student Branch Chapter, providing a dynamic platform for discussions on the evolving role of robotics in medical applications.

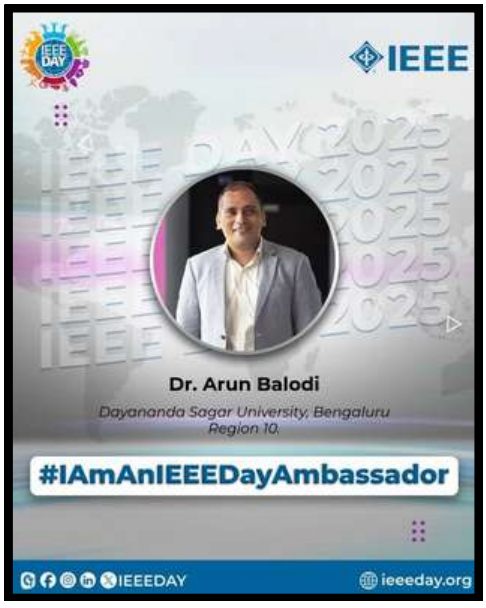
Dr. Arun Balodi expressed his sincere appreciation to the IEEE RAS Bangalore Section, Dr. Mangala Gowri S. G., and the IEEE BGS Student Branch Chapter for their valuable support and collaboration in organizing this impactful session.


FDP on AI-Powered Robotics in Industrial Automation Applications for Future Research
Jointly organized by IEEE RAS Bangalore Chapter and IEEE BGS Student Branch Chapter
Robotics in Healthcare
Dr. Arun Balodi, Professor & Chairman,
Electronics and Communication Engineering
DAYANANDA SAGAR UNIVERSITY
School of Engineering,
Dayananda Sagar University, Bengaluru.

Dr. Arun Balodi, Professor and Chairman, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, was recognized as an Expert Speaker during the Faculty Development Programme on Intelligent Systems and Emerging Technologies in Computing and Electronics (ISETCE–2025), organized by UPES, Dehradun, in collaboration with NIT Jamshedpur. This recognition underscores his valuable contributions to academic enrichment and knowledge dissemination in advanced computing technologies.

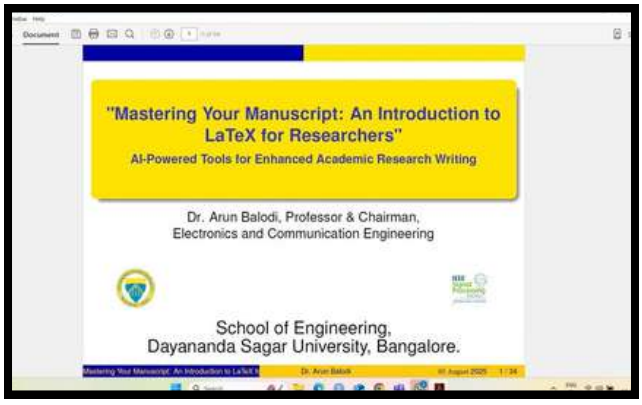
In addition, Dr. Arun Balodi was felicitated by the IEEE Robotics & Automation Society, Bangalore Chapter, for delivering a session in the Faculty Development Programme on AI-Powered Robotics in Industrial Automation Applications for Future Research, organized by BGS College of Engineering and Technology (BGSCET). His expert insights and technical leadership have played a significant role in advancing research and practical applications in the fields of robotics and automation

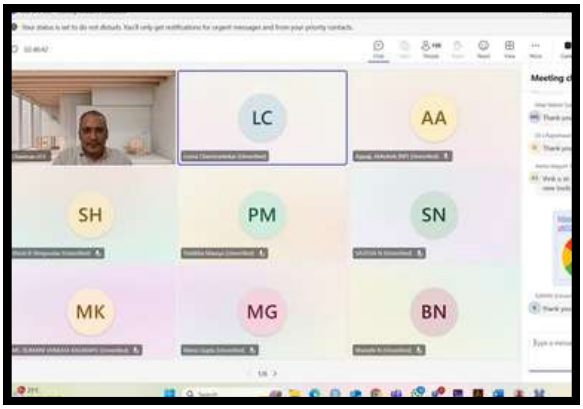
Dr. Arun Balodi, Professor and Chairman, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, has been selected as an IEEE Day 2025 Ambassador, representing Dayananda Sagar University, Bengaluru, Region 10. IEEE Day 2025 will be celebrated on October 7, 2025, with associated events scheduled from October 5 to 18, 2025. In this role, Dr. Balodi will promote innovation, lead impactful community-focused initiatives, and actively contribute to IEEE's mission of "Advancing Technology for Humanity."



Dr. Arun Balodi, Professor and Chairman, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, has recently delivered expert sessions across multiple prestigious academic platforms. He served as an Expert Speaker at the Faculty Development Programme on Intelligent Systems and Emerging Technologies in Computing and Electronics (ISETCE–2025), organized by UPES, Dehradun, in collaboration with NIT Jamshedpur.

He was also felicitated by the IEEE Robotics & Automation Society (RAS) Bangalore Chapter for delivering a technical talk during the Faculty Development Programme on AI-Powered Robotics in Industrial Automation, organized by BGS College of Engineering and Technology (BGSCET).





In addition, Dr. Balodi contributed as a key resource person in the workshop titled “Crafting Research Excellence: Where to Publish, LaTeX & Research Metrics”, organized by the IEEE Signal Processing Society (SPS) Bangalore Chapter and IEEE Women in Engineering (WIE) AG – Bangalore Section. His session focused on AI-powered LaTeX tools, research visibility platforms, journal selection strategies, and author-level impact metrics. Through these engagements, Dr. Balodi continues to bridge emerging technologies with effective and impactful research practices.

Dr. Arun Balodi, Professor and Chairman, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, was awarded the "Best Paper Presenter" at the 3rd IEEE International Conference on Networks, Multimedia and Information Technology (NMITCON-2025), organized by Nitte Meenakshi Institute of Technology, Bengaluru, in association with the IEEE Bangalore Section.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IEEE NMITCON 3rd IEEE International Conference on Networks, Multimedia and Information Technology

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at the 3rd IEEE International Conference on Networks, Multimedia and Information Technology (NMITCON-2025) during 1st-2nd, August 2025 in Association with IEEE Bangalore Section, Organized by Nitte Meenakshi Institute of Technology, Bengaluru.

Dr. PARAMESHACHARI B D, Conference Chair, NMITCON, Professor & HoD, Dept. of ECE, NMIT

Dr. H C NAGARAJ, Principal, NMIT

Technical Co-Sponsor: IEEE

Academic Partners: Universidad de Salamanca

The award was conferred for his paper titled "Dual Mode Robotic Arm Control System: Voice and Gesture Integration", which received high appreciation for its innovative approach and significant research contribution. The conference was held on 1st–2nd August 2025, with technical sponsorship from the IEEE Bangalore Section and academic partnerships with the Universidad de Salamanca (Spain) and the University of Technology, Mauritius. The university congratulates Dr. Arun Balodi on this remarkable achievement and wishes him continued success in his research endeavors.

On the occasion of World Entrepreneurship Day 2025, Dr. Arun Balodi, Professor and Chairman, Department of Electronics and Communication Engineering, Dayananda Sagar University, Bengaluru, proudly took the Entrepreneurship Pledge, reaffirming his commitment to innovation, leadership, and entrepreneurial growth.

In recognition of his dedication to fostering entrepreneurship and strengthening the spirit of enterprise, Dr. Balodi was awarded a certificate of recognition by TiE Bangalore. This achievement underscores his continued pursuit of excellence and his role in inspiring future entrepreneurs to take bold steps toward creating impactful and sustainable ventures.

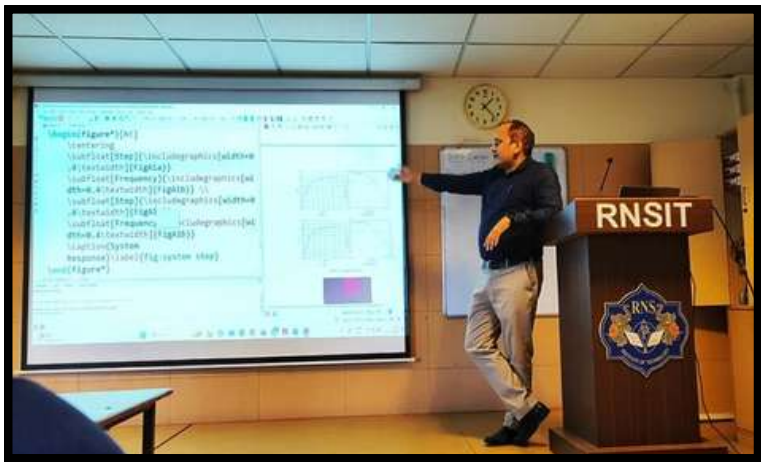
Dr. Arun Balodi, Professor and Chairman, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, served as a Reviewer for the IEEE International Conference on Communication and Smart Devices (ICCoSD-2025). The conference was organized by Birla Institute of Technology, Mesra, Ranchi, and held on 25th–26th July 2025, under the technical co-sponsorship of the IEEE Kolkata Section.


BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
IEEE International Conference on Communication and Smart Devices
(ICCoSD)-2025
"Connecting Intelligence"
Technical Co-sponsorship of IEEE Kolkata section
25th -26th July 2025
IEEE
CERTIFICATE OF APPRECIATION
Dr. Arun Balodi , Dayananda Sagar University, Bengaluru
has rendered commendable service as a **reviewer** during the successful organization of ICCoSD-2025, held on 25th-26th July 2025, under the technical co-sponsorship of IEEE Kolkata Section. His/her dedication, planning, and tireless efforts have significantly contributed to the smooth execution and overall success of the conference.
DR. GAJENDRA KANT MISHRA
Convenor, ICCoSD 2025
PROF. SANJAY KUMAR
Chairman ICCoSD 2025

Dr. Arun Balodi, Professor and Chairman, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, participated in the 6th Edition of the IEEE Bangalore Technology Conclave (BTC 2025), held on September 12–13, 2025, in Bengaluru.
The conclave focused on the theme "System & Software Co-Design for Sustainable AI" and offered insightful discussions on designing AI systems that are both technologically advanced and environmentally sustainable.
The event brought together eminent experts from academia, industry, and research organizations, providing a comprehensive perspective on the development of responsible and sustainable AI solutions.

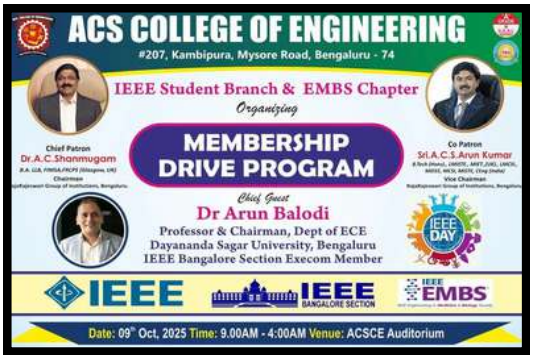
Dr. Arun Balodi, Professor and Chairman, Department of Electronics and Communication Engineering, Dayananda Sagar University, Bengaluru, served as a Resource Expert for the workshop titled "Crafting Research Excellence", held on October 25, 2025, at RNS Institute of Technology (RNSIT), Bengaluru.

The workshop was organized by the Departments of Electronics and Communication Engineering and Master of Computer Applications, RNSIT, in collaboration with the IEEE Signal Processing Society and the IEEE Education Society Student Chapters. The event aimed to enhance research competencies among participants, focusing on research methodologies, effective literature review strategies, LaTeX-based research documentation, and an understanding of publication metrics.



As part of the IEEE Day 2025 celebrations, Dr. Arun Balodi, Professor and Chairman, Department of Electronics and Communication Engineering, Dayananda Sagar University, served as the Chief Guest and Resource Speaker at the IEEE Membership Drive Program, organized by the IEEE Student Branch and EMBS Chapter, ACS College of Engineering, on October 9, 2025.

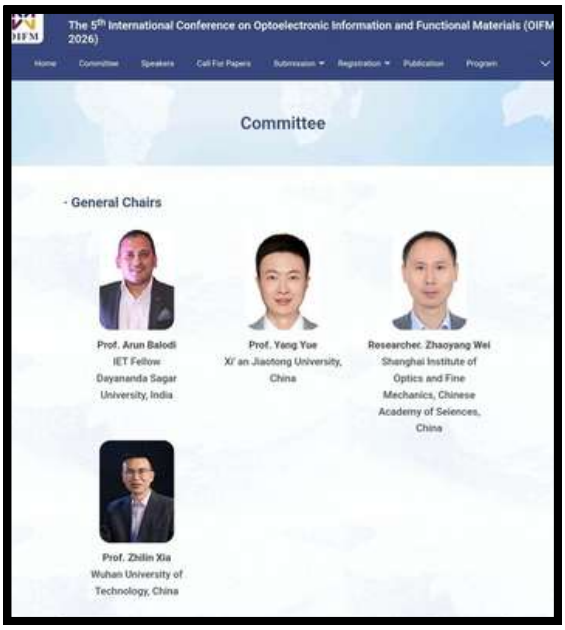
Dr. Arun Balodi delivered an insightful session on "The Role of Professional Societies in Career Management," highlighting the significance of IEEE membership in promoting professional growth, interdisciplinary collaboration, and research excellence. The event saw enthusiastic participation from students and faculty members, reflecting a strong commitment to continuous learning and professional development.

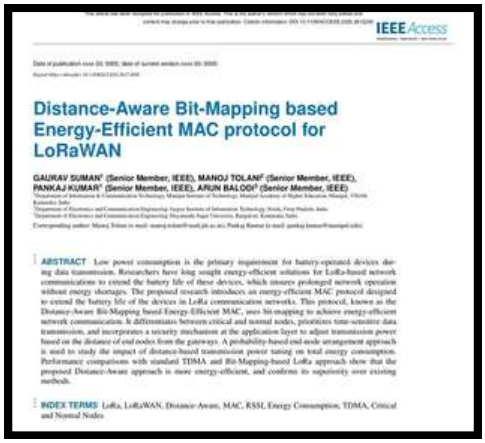


Dr. Arun Balodi, Professor and Chairman, Department of Electronics and Communication Engineering, Dayananda Sagar University, is serving as the Conference General Chair for the 5th International Conference on Optoelectronic Information and Functional Materials (OIFM 2026).

The conference will be held in Zibo, China, from April 10–12, 2026, and will be conducted in a hybrid mode, enabling both virtual and in-person participation. OIFM 2026 will provide a global platform for researchers, academicians, and industry professionals to exchange knowledge and advancements in areas such as Optoelectronic Information Systems, Nanomaterials, Semiconductor Devices, and Optoelectronic Sensing Technologies.

The conference proceedings will be published by SPIE and indexed in EI and Scopus, ensuring high visibility and academic impact. Dr. Arun Balodi's leadership in this international conference underscores Dayananda Sagar University's active contribution to global research collaboration and emerging technological advancements.




IEEE Access

Distance-Aware Bit-Mapping based Energy-Efficient MAC protocol for LoRaWAN

GAURAV SUMAN[1] (Senior Member, IEEE), MANOJ TOLANI[2] (Senior Member, IEEE), PANKAJ KUMAR[3] (Senior Member, IEEE), ARUN BALODI[3] (Senior Member, IEEE)

ABSTRACT Low power consumption is the primary requirement for battery-operated devices during data transmission. Researchers have long sought energy-efficient solutions for LoRa-based network communications to extend the battery life of these devices, which ensures prolonged network operation without energy shortages. The proposed research introduces an energy-efficient MAC protocol designed to extend the battery life of the devices in LoRa communication networks. This protocol, known as the Distance-Aware Bit-Mapping based Energy-Efficient MAC, uses bit-mapping to achieve energy-efficient network communication. It differentiates between critical and normal nodes, prioritizes time-sensitive data transmissions, and incorporates a security mechanism at the application layer to adjust transmission power based on the distance of end nodes from the gateways. A probability-based end-node arrangement approach is used to study the impact of distance-based transmission power tuning on total energy consumption. Performance comparisons with standard TDMA and Bit-Mapping-based LoRa approach show that the proposed Distance-Aware approach is more energy-efficient, and confirms its superiority over existing methods.

INDEX TERMS LoRa, LoRaWAN, Distance-Aware, MAC, RSSI, Energy Consumption, TDMA, Critical and Normal Nodes

Dr. Arun Balodi, Professor and Chairman, Department of Electronics and Communication Engineering, Dayananda Sagar University, has published a research article titled "Distance-Aware Bit-Mapping Based Energy-Efficient MAC Protocol for LoRaWAN" in IEEE Access under Early Access.

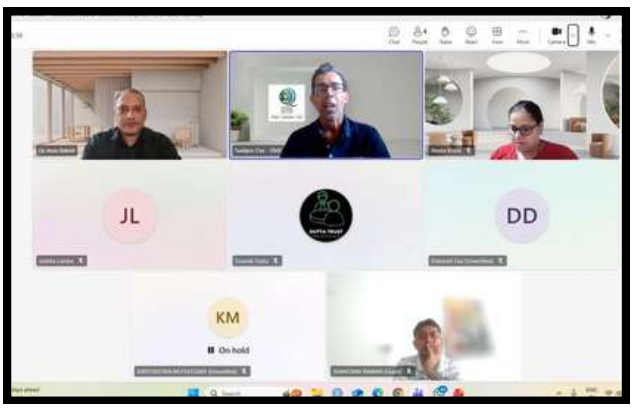
The paper presents a novel energy-efficient MAC protocol for LoRa communication networks using a distance-aware bit-mapping approach to enhance network performance and extend device battery life. The proposed method effectively prioritizes time-sensitive data and demonstrates superior energy efficiency compared to conventional TDMA-based systems, highlighting Dr. Arun Balodi's ongoing contributions to research in IoT and low-power wireless communication technologies

Dr. Arun Balodi, Professor and Chairman, Department of Electronics and Communication Engineering, Dayananda Sagar University, participated as an invited speaker at the IEEE Faculty Conclave 2025, organized by the IEEE Mangalore Subsection at Bearys Institute of Technology, Mangalore, on September 20, 2025.

The conclave brought together distinguished academicians and researchers from across Karnataka to deliberate on Innovation and Nation Building. Dr. Arun Balodi actively contributed to discussions on innovative teaching methodologies, industry–academia collaboration, and the crucial role of faculty in advancing research and fostering innovation, reinforcing the evolving responsibility of educators in shaping future engineers and innovators.

Dr. Arun Balodi, Chairperson and Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, delivered a session titled “Creating Interactive Course Materials Using Technology to Enhance Learning” for participants of the Diploma in Professor in Practice (PoP) program at ISME Bengaluru on November 26, 2025.

Aligned with the NEP 2020 framework, the session introduced participants to interactive digital tools, multimedia content development strategies, and LMS-based course design approaches, supporting senior industry professionals in their transition into academia. The session witnessed active engagement from participants, underscoring the program’s commitment to blending industry expertise with contemporary pedagogical practices.



Dr. Arun Balodi, Chairperson and Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, served as a Jury Member for Anveshan 2025, the flagship hackathon of the IEEE Bangalore Section Student Activities Committee (SAC).

The event featured innovative software and hardware solutions developed by student teams who progressed through two competitive rounds to reach the grand finale held in Bengaluru. The hackathon offered meaningful industry exposure and highlighted the creativity, technical proficiency, and problem-solving capabilities of emerging engineers.

The Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University (DSU), in collaboration with the Centre for Training and Learning (CTL), NIT Warangal, organized a five-day online Faculty Development Program (FDP) titled "Innovative Antenna Design for Advanced Communication Technologies: From Concept to Implementation" from 08 to 12 December 2025.

The program was convened by Dr. Arun Balodi, Professor, Department of ECE, DSU. Prof. Damera Vakula, Department of ECE, NIT Warangal, served as the Principal Investigator, with Dr. Ramesh Amugothu, Assistant Professor, Department of ECE, DSU, as the Coordinator. Eminent resource persons from IITs, NITs, DRDO, industry, DSU, and NIT Warangal delivered expert sessions covering advanced antenna technologies, seamlessly integrating theoretical concepts, design methodologies, and practical insights. The FDP benefitted faculty members, research scholars, and industry professionals from across India.

DR. ARUNGALAI VENDAN

Dr. Arungalai Vendan S, Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, has earned the NPTEL Elite Certification in Accreditation and Outcome Based Learning (August–October 2025), securing an excellent overall score of 90%.

This achievement reflects his strong commitment to academic excellence and a deep understanding of outcome-based education principles, contributing significantly to quality assurance and continuous improvement in engineering education. Congratulations to Dr. Arungalai Vendan S on this noteworthy accomplishment.

DR.PUSHPA MALA S

Dr. Pushpamala S, Associate Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, served as a Track Chair at the 11th International Conference on Electronics, Computing and Communication Technologies (IEEE CONECCT 2025), held from July 10–13, 2025, at Sterling's Mac Hotel, Bengaluru.

Organized by the IEEE Bangalore Section, the conference brought together eminent researchers, academicians, and industry professionals from across the globe. Dr. Pushpamala S's contribution as Track Chair played a significant role in the successful conduct of the conference, reflecting her commitment to academic leadership and excellence in emerging technologies.

This certificate recognizes Pushpa Mala S. for presenting their paper titled "Image Artifact Removal Using DnCNN in Low Bandwidth Wireless Communication." It was awarded at the IEEE ICWITE 2025 conference, focused on women in innovation, technology, and entrepreneurship with the theme "Engineering Sustainable Futures Responsibly." The event took place on September 26-27, 2025, organized by BGS College of Engineering, Affinity Group, Bangalore Section.


IEEE BANGALORE SECTION

ICWITE 2025

CERTIFICATE

OF APPRECIATION

This certificate is presented to

Naeem Ahmed, Arun Ananthanarayanan, Navya R, Spoorthi B S, Pushpa Mala S,

for presenting the paper titled

Image Artifact Removal Using DnCNN in Low Bandwidth Wireless Communication

in the 3rd **IEEE International Conference for Women in Innovation, Technology, and Entrepreneurship**, (ICWITE 2025) on 26-27 Sep 2025 organized by **IEEE Women in Engineering Affinity Group Bangalore Section** at B. G. S. College of Engineering, Bangalore.

Prof. Ashwini VR, General Co-Chair, IEEE ICWITE 2025

Dr. Usha Rani K R, General Co-Chair, IEEE ICWITE 2025

Dr. P Deepa Shenoy, General Chair, IEEE ICWITE 2025

DR. VINU R

Dr. Vinu R., Associate Professor, Department of Electronics and Communication Engineering, Dayananda Sagar University, presented a research paper titled “ARM & Kinect Based Home Automation & Assistance System – ArmKHAAS” at the 4th International Conference on Innovative Mechanisms for Industry Applications, organized by Sasurie College of Engineering, Tirupur, India, on 3 September 2025. The paper highlights innovative approaches in home automation and assistive technologies, contributing to advancements in intelligent and user-centric systems.


SASURIE COLLEGE OF ENGINEERING

ICIMIA

IEEE

Certificate of Presentation

This is to certify that

Vinu R

has successfully presented a research paper entitled

ARM & Kinect based Home Automation & Assistance System - ArmKHAAS

at the

4th International Conference on Innovative Mechanisms for Industry Applications(ICIMIA 2025) organised by Sasurie College of Engineering, Tirupur, India on 3-5 September 2025.

Session Chair

Prof. T. Manickam, Conference Chair

Dr.M.Vijayakumar, Principal

Dr. Vinu R., Associate Professor, Department of Electronics and Communication Engineering, Dayananda Sagar University, presented a research paper titled “Machine Learning-Based Early Diagnosis and EMG-Assisted Monitoring of Parkinson’s Disorder” at the 9th IEEE International Conference on Electronics, Communication and Aerospace Technology (ICECA-2025), organized by RVS Technical Campus, Coimbatore, India, and held from 5–7 November 2025. The paper was co-authored by Tejas S, Thanisha Kumar, Venkat Bharadwaj J, Ketan Desai, and Prof. Jisy N. K., and highlights the application of machine learning and EMG techniques for early diagnosis and continuous monitoring of Parkinson’s disorder.

Dr. Vinu R., Associate Professor, Department of Electronics and Communication Engineering, Dayananda Sagar University, has co-authored a research paper titled “FBG-Based Real-Time Data on Hand Pressure for Analysis of Limb Functionality”, which was presented at the 12th International Conference on Computing for Sustainable Global Development (INDIACom 2025), held in Delhi, India, in 2025, and published in IEEE Xplore.

Dr. Vinu R., Associate Professor, Department of Electronics and Communication Engineering, Dayananda Sagar University, has co-authored a research paper titled “Optical Sensor for Rail Wheel Contact Forced Vibration Measurement”, which was presented at the 12th International Conference on Computing for Sustainable Global Development (INDIACom 2025), held in Delhi, India, in 2025.

Dr. Vinu R., Associate Professor, Department of Electronics and Communication Engineering, Dayananda Sagar University, has published a book chapter titled "Artificial Intelligence in Failure Prediction of Aircraft Components and Inventory Leveraging" in Artificial Intelligence Applications in Aeronautical and Aerospace Engineering, Wiley Online, Chapter 18.

DR. ARUN ANANTHANARAYANA

This certificate recognizes Aruna Antharayan for presenting their paper titled "Image Artifact Removal Using DnCNN in Low Bandwidth Wireless Communication." It was awarded at the IEEE ICWITE 2025 conference, focused on women in innovation, technology, and entrepreneurship with the theme "Engineering Sustainable Futures Responsibly." The event took place on September 26-27, 2025, organized by BGS College of Engineering, Affinity Group, Bangalore Section.

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.” The paper was presented at the 4th OPU International Technology Conference on Innovations and Advancements in Industry 5.0 (OTCON 2025) and has been published by IEEE.

The research proposes a novel Key Escrow architecture based on Elliptic Curve Cryptography (KEECC), delivering an efficient and secure approach for data protection in distributed mobile and cloud environments. By integrating Shamir’s threshold secret sharing with elliptic curve cryptography, the proposed mechanism minimizes storage requirements, improves processing efficiency, and enhances data privacy through sub-key splitting and randomized integration.


A Secure Key Escrow Mechanism Using ECC for Distributed Mobile Networks and Cloud Services


Simulation Modelling Practice and Theory

Enhancing 6G wireless performance through advanced MIMO techniques

Arun Ananthanarayanan, S. Kanithan, Sathish Kumar Hari, Naeem Ahmed, Nadeem Pasha

Dr. Arun Ananthanarayanan, Associate Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, has published a Q1-quartile research article titled “Enhancing 6G Wireless Performance Through Advanced MIMO Techniques” in the journal Simulation Modelling Practice and Theory (Elsevier). The paper proposes a Deep SC-OFDM framework that integrates CNN and LSTM models to enable accurate channel estimation, improved bit error rate performance, reduced peak-to-average power ratio, and enhanced spectral efficiency, thereby addressing key challenges in future 6G communication systems. This work highlights the potential of intelligent and energy-efficient transceiver architectures for next-generation wireless networks.

DR. SNEHA SHARMA

Dr. Sneha Sharma, Assistant Professor, Department of Electronics and Communication Engineering, Dayananda Sagar University, Bengaluru, attended a five-day Faculty Development Program titled "Next Generation Semiconductor Technology Advancement, Research and Applications", organized by the Electronics and ICT Academy, NIT Patna, from 23rd to 27th June 2025.


Digital India

Two-weeks Faculty Development Programme on

"Next-Generation Semiconductor Technology Advancement, Research and Applications"

23 June 2025- 27 June 2025

(Supported by Ministry of Electronics and Information Technology (MeitY), Govt. of India)

Certificate of Participation

Sneha Sharma, Faculty, Dayananda Sagar University Bangalore, has participated in the two weeks Faculty Development Program on "Next-Generation Semiconductor Technology Advancement, Research and Applications" organized by Electronics and ICT Academy, NIT Patna under the "Scheme of financial assistance for setting up of Electronics and ICT Academies (Phase-II)" by the Ministry of Electronics and Information Technology (MeitY), Government of India from 23rd June, 2025 - 27th June, 2025. Her/ His performance was Good based on online Assessment.

Dr. Amitesh Kumar
Principal Coordinator
National Institute of Technology Patna

Prof. M. P. Singh
CI, E&ICT Academy
National Institute of Technology Patna


ELSEVIER

Optics & Laser Technology

Certificate of Reviewing

Awarded for 2 reviews in July 2025
presented to

SNEHA SHARMA

in recognition of the review contributed to the journal

The Editors of Optics & Laser Technology

Elsevier Reviewer

Dr. Sneha Sharma, Assistant Professor, Department of Electronics and Communication Engineering, Dayananda Sagar University, Bengaluru, has been honored with a Certificate of Reviewing from Optics & Laser Technology, a reputed journal published by Elsevier, in recognition of her completion of two peer reviews in July 2025. This recognition highlights her valuable contribution to the scholarly peer-review process and her commitment to upholding rigorous standards in scientific research and evaluation.

DR. NAVYA R

Dr. Navya R, Assistant Professor, Department of Electronics and Communication Engineering, has been awarded a certificate for presenting a research paper titled "Automated Wireless Charging System for Electric Vehicles Using Cloud Control" at the 1st IEEE International Conference on Recent Innovation in Science, Engineering and Technology (ICRISET 2025), held at Jeppiaar Institute of Technology, Chennai, Tamil Nadu, India, on 1st and 2nd August 2025. This recognition highlights her active engagement in cutting-edge research and contribution to the field of electric vehicle technologies.


JEPPIAAR INSTITUTE OF TECHNOLOGY

(An Autonomous Institution)

"Self-Belief | Self-Discipline | Self-Respect"

Kanivan, Sunguvarchatram, Sriperumbudur - 631 604

ICRISET-25-T1-300

CERTIFICATE

Technical Sponsored by IEEE

This certificate is presented to

Navya R
Assistant Professor,Dept. of ECE
Dayananda Sagar University
Bengaluru, India

for presenting the research paper entitled Automated Wireless Charging System For Electric Vehicles Using Cloud Control in the IEEE Technical Sponsored 1st International Conference on Recent Innovation in Science, Engineering and Technology (ICRISET 2025) held at Jeppiaar Institute of Technology Chennai, Tamil Nadu, India, on 1st & 2nd, August 2025.

Dr. M. Benisha, M.E., Ph.D.
Conference Chair

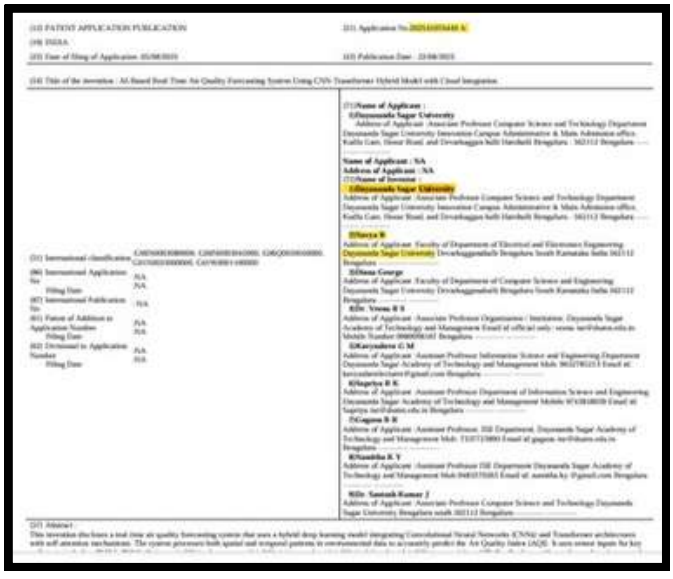
Dr. J. Venu Gopala Krishnan, M.Sc., M.E., Ph.D.
Principal

2025 1st International Conference on
Recent Innovation in Science
Engineering and Technology (ICRISET 2025)

1st-2nd August 2025 | Chennai | India

Dr. Navya R, Assistant Professor, Department of Electronics and Communication Engineering, Dayananda Sagar University, Bengaluru, has been recognized by Springer Nature for her valuable contributions as a peer reviewer in 2025. She reviewed a total of five manuscripts across two reputed journals: Nanotechnology for Environmental Engineering (2 manuscripts on 6th August 2025) , Journal of Nanoparticle Research (3 manuscripts on 5th August 2025) , Journal of Nanoparticle Research (4 manuscripts on 9th october 2025) and Journal of Nanoparticle Research (6 manuscripts in december 2025) . This acknowledgment reflects Dr. Navya R's commitment to advancing scientific research and upholding high standards in scholarly publishing within the fields of nanotechnology and environmental engineering.

Dr. Navya R, Assistant Professor, Department of Electronics & Communication Engineering, School of Engineering, Dayananda Sagar University, has published a patent titled "AI-Based Real-Time Air Quality Forecasting System Using CNN-Transformer Hybrid Model with Cloud Integration" on 22nd August 2025. This innovation reflects her expertise in AI-driven environmental monitoring and highlights her contribution to advancing smart, real-time air quality forecasting technologies.



Dr. Navya R, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, has published a patent titled “Satellite AI System for Roadside and River Plastic/Waste Detection & Rainfall Risk Alerts” on 5th September 2025. This innovation demonstrates her expertise in AI and remote sensing technologies and highlights her contribution to developing smart environmental monitoring and risk-alert systems

Dr. Navya R, Assistant Professor, Department of Electronics and Communication Engineering, Dayananda Sagar University, presented a research paper titled “Pharmaceutical Quality Assurance via Transformer-Based Deep Learning Models for Automated Tablet Defect Detection” at the Second International Conference on Artificial Intelligence and Knowledge Discovery in Concurrent Engineering (ICECONF 2025), sponsored by IEEE, held on October 9–10, 2025, at St. Joseph’s Institute of Technology, Chennai. Her work demonstrates the application of AI in enhancing pharmaceutical quality assurance and automation, showcasing innovative approaches in the field.

Dr. Navya R, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, received a certificate for presenting a paper titled “Generative AI for Artifact Suppression in Wireless Image Transmission” at the 3rd International Intelligent Computing and Technologies Conference (ICTCon 2025), organized by Central Institute of Technology, Kokrajhar, in collaboration with IIT Goa, held on 2nd–3rd December 2025. This recognition highlights her contribution to advancing research in AI-driven wireless communication and imaging technologies

This certificate recognize Nava R. for presenting their paper titled "Image Artifact Removal Using DnCNN in Low Bandwidth Wireless Communication." It was awarded at the IEEE ICWITE 2025 conference, focused on women in innovation, technology, and entrepreneurship with the theme "Engineering Sustainable Futures Responsibly." The event took place on September 26-27, 2025, organized by BGS College of Engineering, Affinity Group, Bangalore Section.


CERTIFICATE

OF APPRECIATION

This certificate is presented to

Naeem Ahmed, Arun Ananthanarayanan, Navya R, Spoorthi B S, Pushpa Mala S,

for presenting the paper titled

Image Artifact Removal Using DnCNN in Low Bandwidth Wireless Communication

in the 3rd IEEE International Conference for Women in Innovation, Technology, and Entrepreneurship, (ICWITE 2025) on 26-27 Sep 2025 organized by IEEE Women in Engineering Affinity Group Bangalore Section at B. G. S. College of Engineering, Bangalore.

Prof. Aswini VR, General Co-Chair, IEEE ICWITE 2025 | Dr. Usha Rani K R, General Co-Chair, IEEE ICWITE 2025 | Dr. P Deepa Shenoy, General Chair, IEEE ICWITE 2025

DR. DIVYASHREE H B

A Design Patent has been successfully registered under the Designs Act, 2000 by the Department of Electronics and Communication Engineering, Dayananda Sagar University, for the innovation titled “Roof-Mount Visual Accident-Detection and Communication Module for Vehicles.”

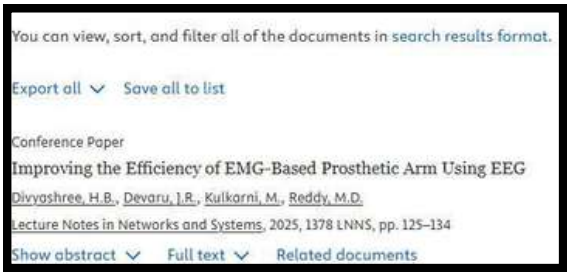
The patent was registered on June 14, 2025 by Dr. Supraja Eduru, Dr. Divyashree H. B, Mrs. Kokila S, and Ms. Jaishree R. Devaru, Assistant Professors from the Department of Electronics and Communication Engineering, Dayananda Sagar University. The design aims to enhance vehicular safety through an innovative roof-mounted accident detection and communication mechanism.

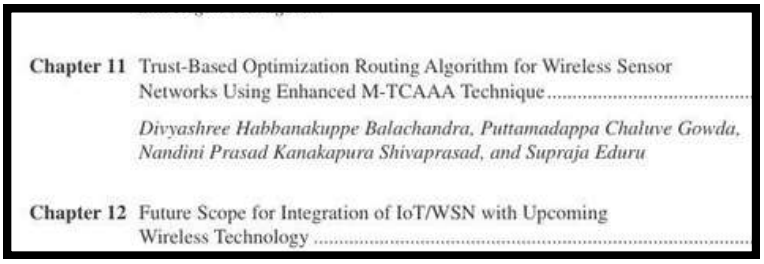
This achievement underscores the department’s strong commitment to research excellence, technological innovation, and the development of smart safety solutions for modern transportation systems.


The Patent Office, Government Of India

Certificate of Registration of Design

Divyashree H.B., along with co-authors Devaru J.R., Kulkarni M., and Reddy M.D., published a conference paper titled "Improving the Efficiency of EMG-Based Prosthetic Arm Using EEG" in the Lecture Notes in Networks and Systems series (2025). The work focuses on enhancing prosthetic arm performance by integrating EEG signals with EMG-based control, enabling more accurate and responsive human–machine interaction. This research contributes to advancements in biomedical signal processing and intelligent assistive technologies.





H. B. Divyashree, in collaboration with Shirshendu Roy, Supraja Eduru, Dev Sharma, and Prathamesh M. Naik, presented a conference paper titled "An Efficient Smart Agriculture Monitor System Using IoT" at SmartCom 2025. The paper proposes an IoT based monitoring system to enhance agricultural productivity through real-time data collection and analysis. The work emphasizes smart farming solutions that enable efficient resource utilization and sustainable agricultural practices

H. B. Divyashree, along with co-authors S. Kokila, Supraja Eduru, and Mythri Peddamariveedu, published a conference paper titled "Heart Disease Detection Using Fundus Imaging and ML Algorithm" in the Innovative Computing and Communications (ICICC 2025) series. The research explores the use of fundus imaging combined with machine learning algorithms for early and non-invasive detection of heart disease. This work highlights the growing role of AI-driven medical imaging in improving diagnostic accuracy and healthcare outcomes.

H. B. Divyashree, in collaboration with Shirshendu Roy, Supraja Eduru, Dev Sharma, and Prathamesh M. Naik, presented a conference paper titled "An Efficient Smart Agriculture Monitor System Using IoT" at SmartCom 2025. The paper proposes an IoT-based monitoring system to enhance agricultural productivity through real-time data collection and analysis. The work emphasizes smart farming solutions that enable efficient resource utilization and sustainable agricultural practices

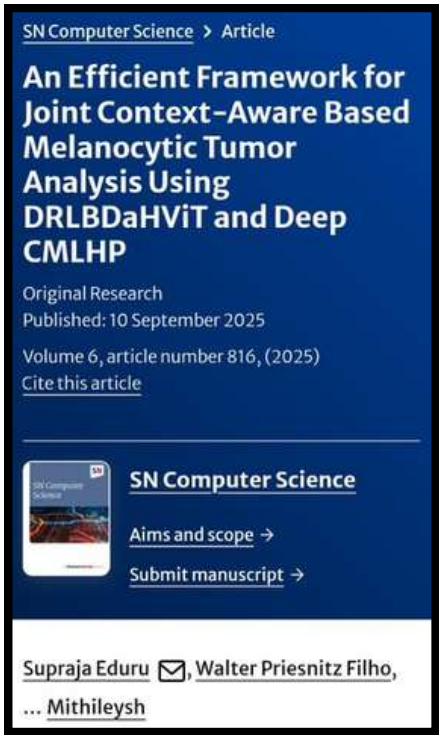
DR. SUPRAJA EDURU

Dr. Supraja Eduru, Assistant Professor, Department of Electronics and Communication Engineering, Dayananda Sagar University, Bengaluru, has received an International Fellowship offer for a Postdoctoral Fellowship in Disruptive Technology at UFSM, Brazil, South America, for the academic year 2025–26.

This notable achievement reflects Dr. Supraja Eduru's dedication to advancing innovative research and her commitment to making impactful scientific contributions on a global platform.

Dr. Supraja Eduru, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, along with Walter Priesnitz Filho, Maria Emilia Camargo, T. Y. Satheesha, and Mithileysh Sathiyanarayanan, has published a research article titled "An Efficient Framework for Joint Context-Aware Based Melanocytic Tumor Analysis Using DRLBDaHViT and Deep CMLHP" in SN Computer Science (Springer Nature) on 10th September 2025 (Volume 6, Article 816).

The study proposes an advanced framework for melanocytic tumor analysis by integrating context-aware models with deep learning techniques, enabling efficient and accurate medical image analysis. This publication forms part of Dr. Supraja Eduru's postdoctoral research, carried out in collaboration with UFSM (Santa Maria University), Brazil.


SN Computer Science › Article

An Efficient Framework for Joint Context-Aware Based Melanocytic Tumor Analysis Using DRLBDaHViT and Deep CMLHP

Original Research
Published: 10 September 2025
Volume 6, article number 816, (2025)
Cite this article

SN Computer Science
Aims and scope →
Submit manuscript →

Supraja Eduru, Walter Priesnitz Filho, ... Mithileysh

A Design Patent has been successfully registered under the Designs Act, 2000 by the Department of Electronics and Communication Engineering, Dayananda Sagar University, for the innovation titled "Roof-Mount Visual Accident-Detection and Communication Module for Vehicles."

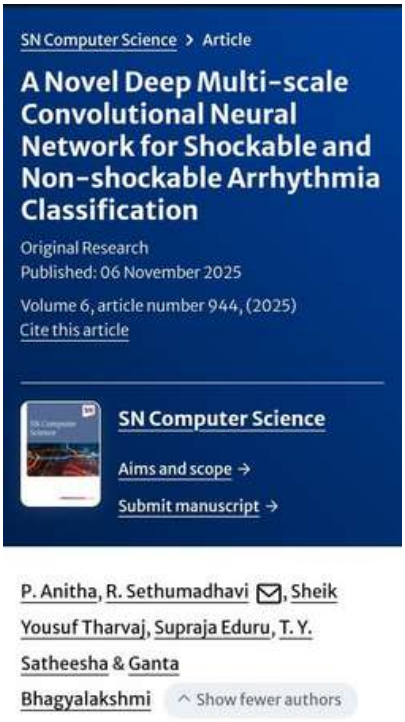
The patent was registered on June 14, 2025 by Ms. Supriya Eduru, Dr. Divyashree H. B, Mrs. Kokila S, and Ms. Jaishree R. Devaru, Assistant Professors from the Department of Electronics and Communication Engineering, Dayananda Sagar University. The design aims to enhance vehicular safety through an innovative roof-mounted accident detection and communication mechanism.

This achievement underscores the department's strong commitment to research excellence, technological innovation, and the development of smart safety solutions for modern transportation systems.

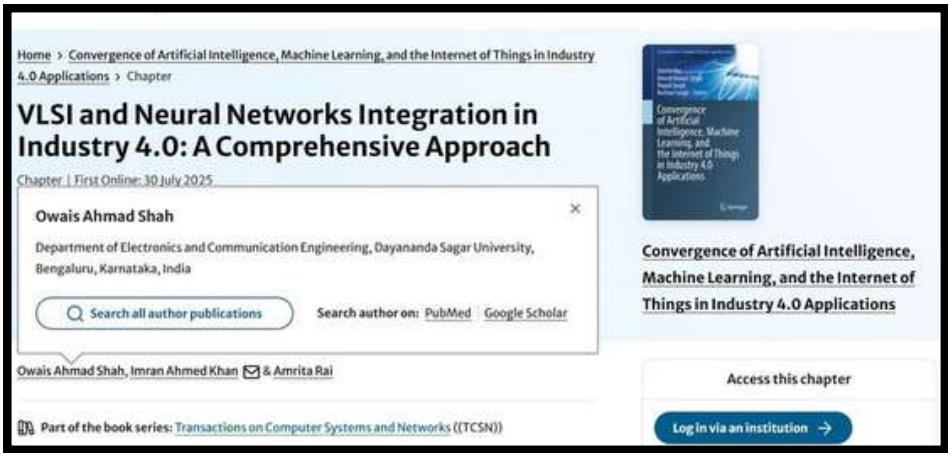

The Patent Office, Government Of India
Certificate of Registration of Design

Dr. Supraja Eduru, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, has published a research article titled "A Novel Deep Multi-scale Convolutional Neural Network for Shockable and Non-shockable Arrhythmia Classification" in SN Computer Science (Springer Nature) on 6th November 2025 (Volume 6, Article 944).

The paper presents a novel deep learning–based approach for accurate classification of cardiac arrhythmias and forms part of a collaborative research effort, highlighting contributions toward advanced healthcare and biomedical signal processing.



DR. OWAIS AHMAD SHAH



Dr. Owais Ahmad Shah, Assistant Professor, Department of Electronics and Communication Engineering, Dayananda Sagar University, Bengaluru, has authored a book chapter titled "VLSI and Neural Networks Integration in Industry 4.0: A Comprehensive Approach" in the recently published Springer book Convergence of Artificial Intelligence, Machine Learning, and the Internet of Things in Industry 4.0 Applications, released in July 2025.

The chapter examines the integration of Very Large Scale Integration (VLSI) and neural network technologies to enhance key Industry 4.0 applications, including sensor integration, edge computing, predictive maintenance, quality control, and anomaly detection, highlighting practical and scalable approaches for intelligent industrial systems.

Dr. Owais Ahmad Shah, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, successfully completed the AICTE Training and Learning (ATAL) Academy Faculty Development Program on "Secure and Explainable Generative AI for Medical IoT Data Analytics", organized by the National Institute of Technology (NIT) Puducherry, from 25th to 30th August 2025.

The FDP focused on advanced concepts in Generative AI, security and privacy aspects, explainable AI models, and their applications in Medical IoT data analytics, offering participants valuable hands-on experience and insights into emerging research trends. This accomplishment reflects the faculty's continuous efforts toward professional development and contributions to cutting-edge research and innovation

Dr. Owais Ahmad Shah, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, has successfully completed the AICTE Training and Learning (ATAL) Faculty Development Program on Advanced VLSI Design and AI-enabled Automation for Next-Generation Semiconductor Manufacturing.

The FDP was organized by NRI Institute of Technology from 1st to 6th September 2025 under the aegis of the All India Council for Technical Education (AICTE), New Delhi. The program aimed to enhance faculty expertise in cutting-edge areas of VLSI design, semiconductor technologies, and AI-enabled automation, contributing significantly to bridging the gap between academic research and industry requirements in the rapidly evolving semiconductor sector.

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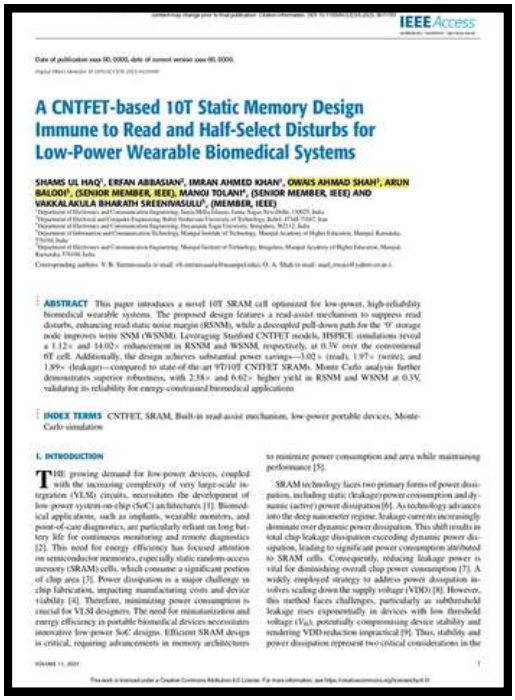


IEEE Access

A CNTFET-based 10T Static Memory Design Immune to Read and Half-Select Disturbs for Low-Power Wearable Biomedical Systems

SHAMS UL HAQ[1], ERFAN ABBASIAN[2], IMRAN AHMED KHAN[3], OWAIS AHMAD SHAH[3], ARUN BALODI[3], (SENIOR MEMBER, IEEE), MANOJ TOLANI[4], (SENIOR MEMBER, IEEE) AND VAKKALAKULA BHARATH SREENIVASULU[5], (MEMBER, IEEE)

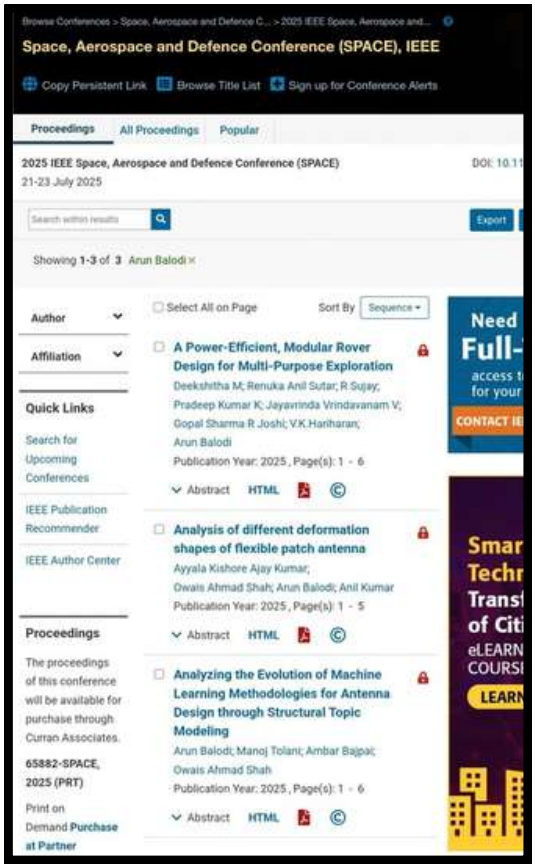
ABSTRACT This paper introduces a novel 10T SRAM cell optimized for low-power, high-reliability biomedical wearable systems. The proposed design features a read-assist mechanism to suppress read disturbs, enhancing read static noise margin (RSNM), while a decoupled pull-down path for the '0' storage node improves write SNM (WSNM). Leveraging Stanford CNTFET models, HSPICE simulations reveal a 1.12× and 14.02× enhancement in RSNM and WSNM, respectively, at 0.3V over the conventional 6T cell. Additionally, the design achieves substantial power savings—3.02× (read), 1.97× (write), and 1.89× (leakage)—compared to state-of-the-art 9T/10T CNTFET SRAMs. Monte Carlo analysis further demonstrates superior robustness, with 2.38× and 6.62× higher yield in RSNM and WSNM at 0.3V, validating its reliability for energy-constrained biomedical applications

INDEX TERMS CNTFET, SRAM, Built-in read-assist mechanism, low-power portable devices, Monte-Carlo simulation

I. INTRODUCTION

THE growing demand for low-power devices, coupled with the increasing complexity of very large-scale integration (VLSI) circuits, necessitates the development of low-power system-on-chip (SoC) architectures [1]. Biomedical applications, such as implants, wearable monitors, and point-of-care diagnostics, are particularly reliant on long battery life for continuous monitoring and remote diagnostics [2]. This need for energy efficiency has focused attention on semiconductor memories, especially static random-access memory (SRAM) cells, which consume a significant portion of chip area [3]. Power dissipation is a major challenge in chip fabrication, impacting manufacturing costs and device viability [4]. Therefore, minimizing power consumption is crucial for VLSI designers. The need for miniaturization and energy efficiency in portable biomedical devices necessitates innovative low-power SoC designs. Efficient SRAM design is critical, requiring advancements in memory architectures to minimize power consumption and area while maintaining performance [5].

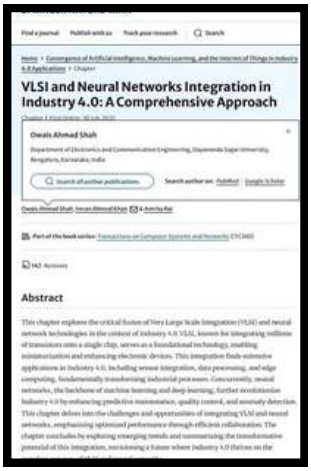
SRAM technology faces two primary forms of power dissipation, including static (leakage) power consumption and dynamic (active) power dissipation [6]. As technology advances into the deep nanometer regime, leakage currents increasingly dominate over dynamic power dissipation. This shift results in total chip leakage dissipation exceeding dynamic power dissipation, leading to significant power consumption attributed to SRAM cells. Consequently, reducing leakage power is vital for diminishing overall chip power consumption [7]. A widely employed strategy to address power dissipation involves scaling down the supply voltage (VDD) [8]. However, this method faces challenges, particularly as subthreshold leakage rises exponentially in devices with low threshold voltage (V_{th}), potentially compromising device stability and rendering VDD reduction impractical [9]. Thus, stability and power dissipation represent two critical considerations in the



Dr. Arun Balodi, Professor and Chairman, and Mr. Owais Ahmad Shah, Assistant Professor, Department of Electronics and Communication Engineering, Dayananda Sagar University, have published multiple research papers at the 2025 IEEE Space, Aerospace and Defence Conference (SPACE), held from July 21–23, 2025.

Their research contributions include papers titled “Analyzing the Evolution of Machine Learning Methodologies for Antenna Design through Structural Topic Modeling,” “Analysis of Different Deformation Shapes of Flexible Patch Antenna,” and “A Power-Efficient Modular Rover Design for Multi-Purpose Exploration.” These works, co-authored with researchers from leading institutions, focus on advanced antenna technologies, machine learning integration, and autonomous rover design, highlighting DSU’s continued excellence in innovation and applied research within the aerospace and defense domains.

Dr. Owais Ahmad Shah, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, has published a book chapter titled "VLSI and Neural Networks Integration in Industry 4.0: A Comprehensive Approach" on Springer Nature Link (first online on 30 July 2025), as part of the Transactions on Computer Systems and Networks (TCSN) series.
The chapter explores the integration of VLSI and neural networks for Industry 4.0 applications, emphasizing their significance in smart manufacturing and the development of intelligent systems.


VLSI and Neural Networks Integration in Industry 4.0: A Comprehensive Approach

Owais Ahmad Shah

Abstract

Dr. Owais Ahmad Shah, Department of Electronics and Communication Engineering, Dayananda Sagar University, co-authored a research paper titled "Temperature and Voltage Aware Evaluation of TSPC Flip-Flops with Application Oriented Design Insights." The work presents an in-depth analysis of TSPC flip-flop performance under varying temperature and voltage conditions, offering valuable design insights for robust and application-oriented high-speed digital circuits

Dr. Owais Ahmad Shah, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, has published a book chapter titled "VLSI and Neural Networks Integration in Industry 4.0: A Comprehensive Approach" on Springer Nature Link, first published online on 30 July 2025, as part of the Transactions on Computer Systems and Networks (TCSN) series.
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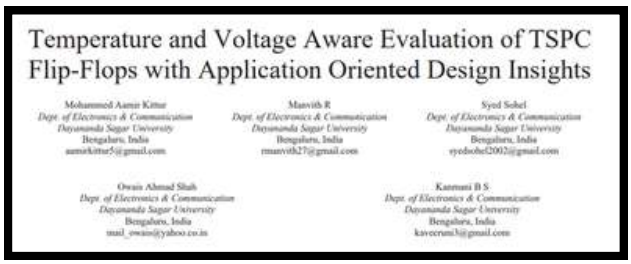

Temperature and Voltage Aware Evaluation of TSPC Flip-Flops with Application Oriented Design Insights


Taylor & Francis Group

Mitigating V-folding resonance shifts in flexible patch antennas through ground plane resizing

ABSTRACT

DR RAMESH AMUGOTHU

One-week Faculty Development Program (FDP) on "The Recent Trends in AI/ML Design, Imaging Programming: Active & Passive Components and Beyond," held from July 7-11, 2025. Supported by the Ministry of Electronics and Information Technology (MeitY), Government of India, under the Digital India initiative, it was organized by Ramakrishna Mission Vivekananda University, NIT Patna, and Netaji Subhas Chandra Bose Sub Campus Design Imaging College, Kolkata.


Certificate of Participation


IEEE Microwaves, Antennas and Propagation Conference 2025

Certificate of Participation

is presented to

Paper Id: 1571177446

Paper Title: Compact Ultrawideband Mesamaterial Absorber for Triple-Band EMC and EMI Applications

Author Names: Ramesh Amugothu; Nageswar Rao Thadikamalla; Sunkarabina Sreenu

for demonstrating exceptional engagement and active involvement throughout the IEEE Microwaves, Antenna and Propagation Conference (MAPCON) 2025, held from 14 - 18 December, 2025 at Grand Hyatt, Kochi, India.

December, 2025

Christophe Fumeaux, 2025 President, IEEE AP-S

Chinmay Saha, General Chair, MAPCON-2025, Kochi

Goutam Chattopadhyay, 2025 President, IEEE MTT-S

IEEE MAPCON 2025 with paper ID 1711744, titled "Compact Ultrawideband Metasurface for Triple-Band EMC & EMI." The paper addresses advanced electromagnetic compatibility and interference mitigation using metasurface technology. The event, IEEE Microwaves, Antennas and Propagation Conference (MAPCON 2025), occurred December 14-18, 2025, at Lulu International Convention Centre, Grand Hyatt Bolgatty, Kochi, India, organized by IEEE MTT-S AP-S and Ramakrishna Mission. It recognizes their exceptional engagement during the conference.

This certificate from the National Institute of Technology (NIT) Warangal honors Dr. A. Ramesh for his valuable contribution as Coordinator of a 5-day online Faculty Development Program (FDP) titled "Innovative Antennas Design" Organized by the Centre for Communication Training & Technologies at Dayananda Sagar University, Bengaluru, the event ran from December 8-12, 2025, under the Ministry of Education's Scheme for MTSS


CENTRE FOR TRAINING AND LEARNING

NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL

(An Institute of National Importance)

CERTIFICATE OF APPRECIATION

Presented to

Dr. A. Ramesh

Department of ECE, Dayananda Sagar University, Bengaluru

in recognition of his contribution as Coordinator in the 5-Day Online Faculty Development Program on "Innovative Antenna Design for Advanced Communication Technologies: From Concept to Implementation", organized by the Centre for Training and Learning, National Institute of Technology Warangal in association with the Dayananda Sagar University, Bengaluru during 8th - 12th December, 2025.

Prof. M. Sailaja Kumari, Head, CTL, NITW

Prof. Bidyadhar Subudhi, Director, NITW


Electronics & ICT Academy

Supported by Ministry of Electronics and Information Technology (MeitY), Govt. of India

National Institute of Technology Patna

CERTIFICATE

This is to certify that

Ramesh Amugothu, Faculty, Dayananda Sagar University, has participated in the one week Faculty Development Program on "Innovative Antenna Design for Next-Generation Wireless Systems: From Concept to Application" organized by MNNIT Allahabad under the "Scheme of financial assistance for setting up of Electronics and ICT Academies (Phase-II)" by the Ministry of Electronics and Information Technology (MeitY), Government of India from 26th August, 2025 to 30th August, 2025. Her/ His performance was Good based on online Assessment.

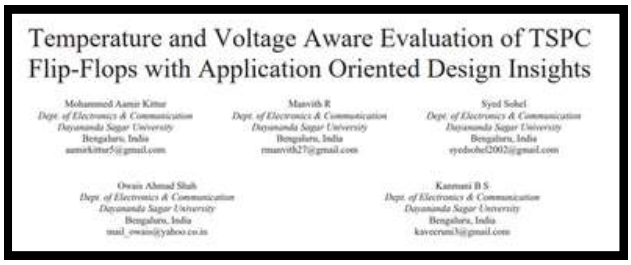
Dr. Arun Kumar Saurabh, MNNIT Allahabad

Prof. N. P. Singh, I/C I&ICT Academy, National Institute of Technology Patna

This certificate recognizes Ramesh's participation in a one-week Faculty Development Program titled "Innovative Antenna Designs for Next-Generation Wireless Systems: From Concept to Application." Held from August 26-30, 2025, it was organized by MNIT Jaipur with support from the Ministry of Electronics and Information Technology (MeitY), Government of India, under the Digital India scheme via the National Institute of Technology Patna

MS. KANMANI B S

Mrs. Kanmani B S, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, participated in a one-day offline Faculty Development Program titled "Educate the Educator – Generative AI" held on 13th September 2025 at RV College of Engineering. The program focused on enhancing faculty expertise in Generative AI through industry-oriented interactions, with hands-on exposure to tools such as ChatGPT, LLaMA, Claude, DeepSeek, and Gemini, enabling participants to stay aligned with emerging AI-driven educational and industrial practices.


Temperature and Voltage Aware Evaluation of TSPC Flip-Flops with Application Oriented Design Insights

Prof. Kanmani B. S, Department of Electronics and Communication Engineering, Dayananda Sagar University, co-authored a research paper titled "Temperature and Voltage Aware Evaluation of TSPC Flip-Flops with Application Oriented Design Insights." The work presents an in-depth analysis of TSPC flip-flop performance under varying temperature and voltage conditions, offering valuable design insights for robust and application-oriented high-speed digital circuits

MR. ABHINAV KARAN

Prof. Abhinav Karan, Assistant Professor, Department of Electronics and Communication Engineering, Dayananda Sagar University, Bengaluru, presented his research paper virtually at the 16th International IEEE Conference on Computing, Communication and Networking Technologies (ICCCNT 2025), held from 6th to 11th July 2025 at IIT Indore, Madhya Pradesh. The paper, titled "Efficient Machine Learning Pipeline with Advanced Augmentation Technique to Predict Arc Formation in MIAB Welding" (Paper ID: 5996), was showcased at the conference, which focused on emerging areas such as Artificial Intelligence, Internet of Things (IoT), 6G technologies, cybersecurity, and smart computing.

MS.MANASA K R

Mrs. Manasa, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, participated in 5-day online Faculty Development Program titled "Innovative antenna design for advanced communication technologies:From concept to Implementation", organised by the centre for training and learnibg,National Institute of Technology,Warrangal in association with the Dayananda Sagar University, Bengaluru during 8th -12th December 2025.


CENTRE FOR TRAINING AND LEARNING
NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL
(An Institute of National Importance)

CERTIFICATE OF PARTICIPATION

This is to Certify that
Prof. Manasa K R
Dayananda Sagar University, Bengalore
participated in the 5-Day Online Faculty Developement Program on
"Innovative Antenna Design for Advanced Communication Technologies: From Concept to Implementation", organized by the Centre for Training and Learning, National Institute of Technology Warangal in associaton with the Dayananda Sagar University, Bengaluru during 8th - 12th December, 2025.

Dr. A. Ramesh — Prof. D. Vakula — Prof. M. Sailaja Kumari — Prof. Bidyadhar Subudhi

Prof. Manasa K R, Department of Electronics and Communication Engineering, Dayananda Sagar University, has participated in the one weekfaculty development program on "Innovative antenna design for next generation wireless systems:From concept to application" organized by MNNIT Allahabad under the "scheme of financial assistance for setting up of electronics and ICT Academies" by ministry of Electronics and Information Technology(MEITY), Government of India.


Digital India

Electronics & ICT Academy
Supported by Ministry of Electronics and Information Technology (MeitY), Govt. of India
National Institute of Technology Patna

CERTIFICATE

This is to certify that

Dr. Arun Kumar Saurabh
Coordinator
MNNIT Allahabad

Prof. M.P. Singh
CI, E&ICT Academy
National Institute of Technology Patna

Prof. Manasa K R, Department of Electronics and Communication Engineering, Dayananda Sagar University, published research paper titled "An affordable and eco-friendly EV Scooter for urban mobility"

Pof. Manasa K R, Department of Electronics and Communication Engineering, Dayananda Sagar University, published research paper titled "Pattern reconfigurable antenna design using amc array for enhanced 5g performance"

	Document title	Authors	Source	Year	Citations
1	Conference Paper **An affordable and Eco-Friendly EV Scooter for Urban Mobility** Show abstract · View at Publisher · Related documents	Manasa, K.R., Pushpa Mala, S.	Proceedings of 3rd IEEE International Conference on Knowledge Engineering and Communication Systems Ickecs 2025	2025	0
2	Conference Paper **Pattern Reconfigurable Antenna Design Using Amc Array for Enhanced 5G Performance**	Manasa, K.R., Naik, P.K., Shashi Kumar, D.	4th Wireless Antenna and Microwave Symposium Wams 2025	2025	0

MR. SHARANBASAVARAJU

A one-day technical workshop on “CCTV Monitoring Systems” was conducted on 12th August 2025 at the DSU Harohalli Campus, Bengaluru. The session was led by Mr. Sharanabasavaraj, Assistant Professor, Department of Electronics and Communication Engineering, Dayananda Sagar University, who also served as a mentor to the trainees of Strides Pharma Science Limited, Bengaluru, as part of the On-the-Job Training program organized by Dayananda Sagar University from 6th August to 12th September 2025.

The workshop highlighted the growing importance of CCTV systems in today’s technological landscape, enabling participants to gain insights into surveillance, monitoring, and regulatory compliance. Key topics included system components, signal transmission, data storage, handling, and recovery, along with applications across sectors such as manufacturing, transportation, defence, agriculture, and security. Special emphasis was placed on modern advancements integrating Artificial Intelligence, Machine Learning, and Cloud Computing, enabling features such as object detection, facial recognition, predictive monitoring, automated alerts, and real-time analytics. The session also addressed critical concerns related to privacy and data protection, providing participants with valuable practical exposure relevant to diverse professional domains.


DEPARTMENT OF MECHANICAL ENGINEERING
DAYANANDA SAGAR UNIVERSITY
HAROHALLI CAMPUS, BENGALURU

CERTIFICATE OF APPRECIATION

Presented to Prof. Sharanbasavaraj

In recognition of your outstanding dedication and meritorious service as a Mentor for the trainees of Strides Pharma Science Ltd. during the On-the-job training held from 6th August 2025 to 12th September 2025 conducted by Dayananda Sagar University, Bengaluru. We appreciate your sincere efforts and wish you the best for your future.

MR. PUNEETH S

Mr. Puneeth S, Assistant Professor, Department of Electronics & Communication Engineering, School of Engineering, Dayananda Sagar University, successfully participated in and completed the AICTE Training and Learning (ATAL) Academy Faculty Development Program titled "SEMI-TECH: Semiconductor Innovation & Technology for Next-Gen Electronics".
The FDP was conducted at SRM Institute of Science and Technology from 18th to 23rd August 2025. The program offered valuable insights into recent advancements in semiconductor technologies and next-generation electronic systems, enabling faculty members to strengthen their technical expertise and enhance teaching and learning practices.


ATAL/2025/1754983143

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi -110070

AICTE Training and Learning (ATAL) Academy

Certificate

ARUNA PRIYA P.
Professor Level (AICTE Institute), Coordinator
SRM Institute of Science and Technology

Dr. Sunil Luthra
Director & Bureau Head
Training and Learning Bureau, AICTE

Mr. Puneeth S, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, has successfully completed the AICTE Training and Learning (ATAL) Faculty Development Program on Advanced VLSI Design and AI-enabled Automation for Next-Generation Semiconductor Manufacturing.
The FDP was organized by NRI Institute of Technology from 1st to 6th September 2025 under the aegis of the All India Council for Technical Education (AICTE), New Delhi. The program aimed to enhance faculty expertise in VLSI design, semiconductor technologies, and AI-enabled automation, contributing significantly to bridging the gap between academic research and industry requirements in the rapidly evolving semiconductor sector.


ATAL/2025/1756463818

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi -110070

AICTE Training and Learning (ATAL) Academy

Certificate

SRINIVASARAO VATTIKUTI
Professor Level (AICTE Institute), Coordinator
NRI INSTITUTE OF TECHNOLOGY

Dr. Sunil Luthra
Director & Bureau Head
Training and Learning Bureau, AICTE

MR. NADEEM PASHA

Mr. Nadeem Pasha, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, has successfully completed the AICTE Training and Learning (ATAL) Academy Faculty Development Program on “Secure and Explainable Generative AI for Medical IoT Data Analytics.”

The Faculty Development Program was organized by the National Institute of Technology (NIT) Puducherry from 25th August 2025 to 30th August 2025. The program offered in-depth insights into secure AI frameworks, explainable artificial intelligence models, and Medical IoT data analytics, enabling participants to gain advanced knowledge in AI-driven healthcare applications.

Such accomplishments underscore the department’s continued commitment to academic excellence, research innovation, and the professional development of faculty members.

Mr. Nadeem Pasha, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, has successfully completed the AICTE Training and Learning (ATAL) Academy Faculty Development Program on “Advanced VLSI Design and AI-enabled Automation for Next-Gen Semiconductor Manufacturing.”

The Faculty Development Program was organized by NRI Institute of Technology from 1st September 2025 to 6th September 2025 under the aegis of the All India Council for Technical Education (AICTE), New Delhi. The program aimed at enhancing faculty expertise in advanced VLSI design, emerging semiconductor technologies, and AI-enabled automation techniques for next-generation manufacturing systems.

Mr. Nadeem Pasha, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, has successfully completed the Cadence Training Course on “Tcl Scripting for EDA v8.6”, conducted by Cadence Training Services.
The training, completed on 15 December 2025, enhanced his proficiency in Tcl-based automation and scripting for EDA workflows, thereby strengthening his expertise in VLSI design methodologies and effective utilization of EDA tools.

Mr. Nadeem Pasha, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, presented a research paper titled “Explainable AI Methods for Reliable EEG Artifact Detection in Neurophysiological Studies” at the 2025 IEEE International Conference on Innovate for Humanitarian Technology Solutions for Global Challenges (ICIH).
The conference was held on 21–22 November 2025 at Acropolis Institute of Technology and Research, Indore, and provided a platform to showcase innovative research addressing real-world humanitarian and technological challenges

DR. G SANTHOSH

Dr. G. Santhosh, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, successfully participated in a two-week Faculty Development Programme (FDP) on "Next Generation Wireless Communication and Energy Harvesting Technologies", held from 18 to 29 August 2025.

The FDP was jointly organized by the Electronics and ICT Academy, NIT Patna, and Centurion University of Technology and Management, Paralakhemundi, Odisha, under the Scheme of Financial Assistance for Setting up of Electronics and ICT Academies (Phase-II), with support from the Ministry of Electronics and Information Technology (MeitY), Government of India.

Digital India

Two-week Faculty Development Programme on

"Next Generation Wireless Communication and Energy Harvesting Technologies"

18 – 29 August 2025

ELECTRONICS INDIA

(Supported by Ministry of Electronics and Information Technology (MeitY), Govt. of India)

Certificate of Participation

Dr. G. Santhosh, Faculty, School of Engineering, Dayanand Sagar University, has participated in the two weeks Faculty Development Program on "Next Generation Wireless Communication and Energy Harvesting Technologies" jointly organized by Electronics and ICT Academy, NIT Patna, and Centurion University of Technology and Management, Paralakhemundi, Odisha under the "Scheme of financial assistance for setting up of Electronics and ICT Academies (Phase-II)" by the Ministry of Electronics and Information Technology (MeitY), Government of India from 18th August - 29th August, 2025.

Dr. Pranaya Parimita Pradhan, Coordinator, Centurion University of Technology and Management, Paralakhemundi, Odisha

Dr. Trilochan Pradhi, Coordinator, National Institute of Technology Patna

Prof. M. P. Singh, CI EART Academy, National Institute of Technology Patna

पेटेंट कार्यालय, भारत सरकार The Patent Office, Government Of India

डिजाइन के पंजीकरण का प्रमाण पत्र | Certificate of Registration of Design

Design No. 453281-001

Date 27/03/2025

Country

AUTOMOBILE EMERGENCY ALERTING AUTONOMOUS DEVICE

Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class 10-05 in respect of the application of such design to AUTOMOBILE EMERGENCY ALERTING AUTONOMOUS DEVICE in the name of 1.Sandeep R. Singh 2. Dr. Ashok Kusugur 3.Dr. G. Santosh.

In pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001

Dr. G. Santhosh, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, has successfully registered a design titled "Automobile Emergency Alerting Autonomous Device" with the Patent Office, Government of India. The design (Design No. 453281-001, Class 10-05) was registered on 27 March 2025 under the Designs Act, 2000 and Designs Rules, 2001. This achievement reflects his innovative contribution to autonomous automotive safety solutions, aimed at enhancing emergency alerting systems and improving road safety. The recognition underscores the department's strong culture of research excellence and innovation.

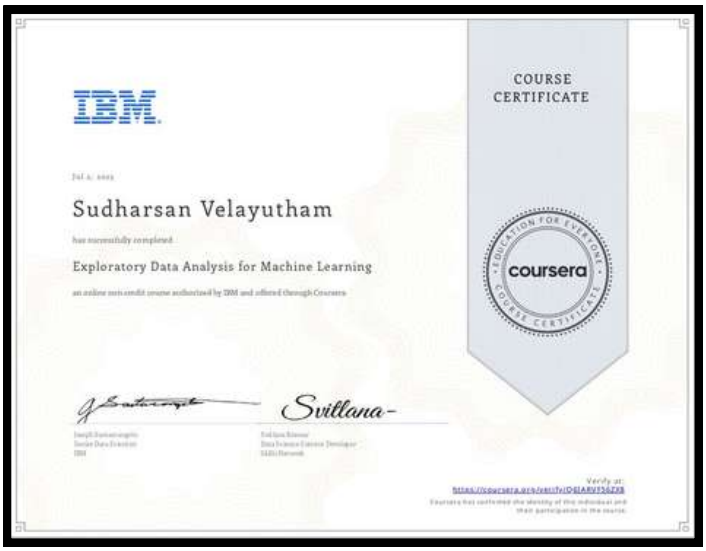
MR. SUDHARSAN VELAYUTHAM

Mr. Sudharsan V, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, under the expert guidance of Dr. Shirshendu Roy, Assistant Professor, Department of Electronics and Communication Engineering, successfully presented a research paper titled "A Novel Hardware-Efficient FPGA Implementation of Multi Linear Regression Algorithm" at IEEE CONECCT 2025, held from 10–13 July 2025 in Bengaluru. Organized by the IEEE Bangalore Section, the prestigious international conference focuses on advances in electronics, computing, and communication technologies. Their work proposed a resource-optimized FPGA architecture that significantly reduces LUT and DSP utilization while enhancing throughput, demonstrating an effective blend of algorithmic innovation and practical hardware design aligned with contemporary research in computer engineering, AI, and signal processing

Mr. Sudharsan V, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, presented a research paper titled "Smart Classroom and Timetable Scheduling System Using Hybrid Graph Coloring and Cloud Optimization" at the 9th International Conference on Electronics, Communication and Aerospace Technology (ICECA 2025). The conference, organized under the IEEE Communications Society, was held from 5–7 November 2025 at RVS Technical Campus, Coimbatore. This work demonstrates a significant contribution to the development of intelligent scheduling and optimization systems, highlighting practical applications of hybrid graph-based and cloud-enabled solutions in academic and organizational settings.

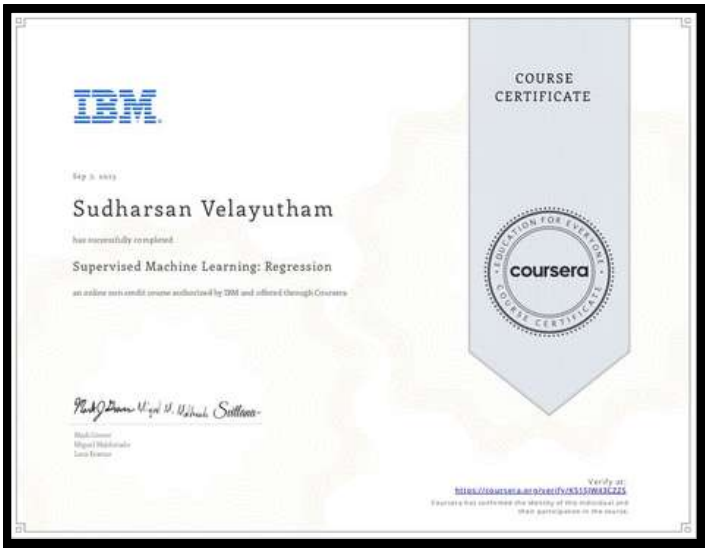
Mr. Sudharsan Velayutham, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, has successfully completed the online certification course "Exploratory Data Analysis for Machine Learning" offered by IBM through Coursera on 2nd July 2025.

The course provided comprehensive knowledge and hands-on experience in Exploratory Data Analysis (EDA), a critical step in the Machine Learning pipeline. This accomplishment reflects Mr. Sudharsan's dedication to enhancing his expertise in data science, analytics, and machine learning applications.



Mr. Sudharsan Velayutham, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru, has successfully completed the online course "Supervised Machine Learning: Regression", an authorized non-credit program by IBM through Coursera.

This certification reflects his commitment to advancing expertise in machine learning and data-driven technologies, with a focus on regression techniques for predictive modeling. Congratulations to Mr. Sudharsan on this achievement, and we look forward to the application of these skills in his future research and projects.



MS. JISY N K

Prof. Jisy N K, Department of Electronics and Communication Engineering, Dayananda Sagar University, was invited to the 10th Edition of the Matrix Global Summit 2025, held on 1st and 2nd July 2025 at the NIMHANS Convention Center, Bengaluru. Organized by TiE Bangalore, the summit brought together global thought leaders, entrepreneurs, and innovators to deliberate on India's deep-tech revolution, focusing on emerging domains such as Artificial Intelligence, Robotics, Industry 5.0, 5G, SpaceTech, Electric Vehicles, AgriTech, HealthTech, and Sustainability.

Adding to the pride of the department, final-year students from the Department of Electronics and Communication Engineering Deepak Saha, Laksmipathi M, Brijesh N, and Chandana Chitnis mentored by Prof. Jisy N K, were selected among the top teams at the Matrix Forum University Awards 2025. The team secured the Second Runner-up Award, receiving a cash prize of ₹20,000, along with a one-year complimentary TiE Bangalore Student Membership and mentorship from TiE Bangalore Charter Members. The students presented an innovative project titled "Vision-Enabled Voice-Controlled Prosthetic Arm with Embedded Processors for Object Manipulation", aimed at empowering persons with disabilities through assistive technology and intelligent system design.

This notable achievement highlights the department's strong culture of innovation, mentorship, and socially impactful research. Heartfelt congratulations to Prof. Jisy N K and the student team for their commendable success.

Prof. Jisy N. K, Assistant Professor, Department of Electronics and Communication Engineering, Dayananda Sagar University, Bengaluru, along with Deepak Saha, a student of the same department, presented their award-winning research titled "Dual-Mode Robotic Arm Control System: Voice and Gesture Integration" at the 3rd IEEE International Conference on Networks, Multimedia and Information Technology (NMITCON-2025). The conference was held on 1st–2nd August 2025 at Nitte Meenakshi Institute of Technology, Bengaluru.

The research work, co-authored with Dr. Vinu R, Prof. Sivasankari S. S., and Dr. Arun Balodi, focuses on advanced multi-modal interaction techniques for smart robotic control systems, integrating voice and gesture-based commands to enhance usability and efficiency.

In recognition of its innovation and technical excellence, the paper was honoured with the Best Paper Award during the conference session. This achievement highlights the department's strong emphasis on cutting-edge research, interdisciplinary collaboration, and impactful contributions in the field of robotics and intelligent systems.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3rd IEEE International Conference on Networks, Multimedia and Information Technology
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for the Paper Titled
Dual-Mode Robotic Arm Control System: Voice and Gesture Integration
at the 3rd IEEE International Conference on Networks, Multimedia and Information Technology (NMITCON-2025) during 1st-2nd, August 2025 in Association with IEEE Bangalore Section, Organized by Nitte Meenakshi Institute of Technology, Bengaluru.
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Conference Chair, NMITCON
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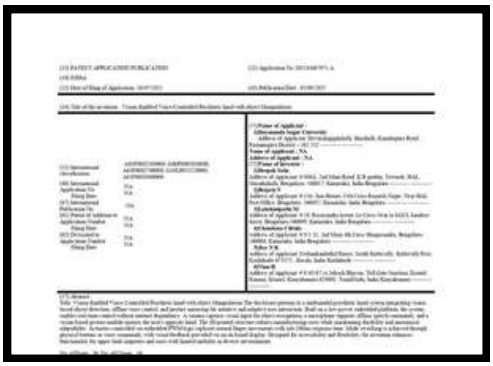
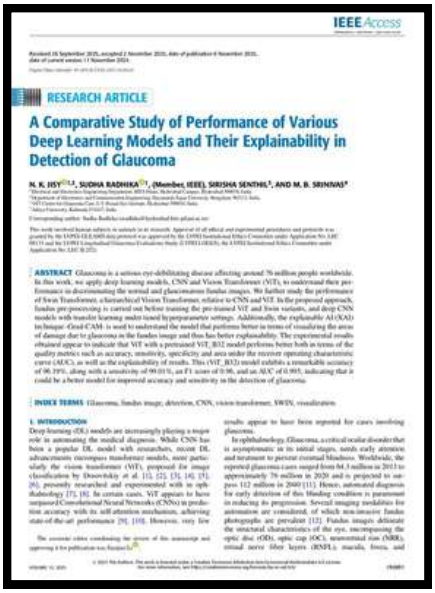
Prof. Jisy N. K., Assistant Professor, and Dr. Vinu R., Associate Professor, from the Department of Electronics and Communication Engineering, Dayananda Sagar University, have published an Indian patent titled "Vision-Enabled Voice-Controlled Prosthetic Hand with Object Manipulation." The patent was published on 5th September 2025, with Deepak Saha, Brijesh N, Lakshmipathi M, Chandana Chitnis, Jisy N. K., and Vinu R. listed as inventors. This innovation focuses on assistive technology, integrating vision and voice control to enable intelligent object manipulation, reflecting the department's commitment to impactful research and inclusive technological advancement.



Prof. Jisy N. K. presented a research paper titled "Vision-Guided Prosthetic Arm with Autonomous Object Interaction" at the IEEE International Conference on Electronics and Sustainable Communication Systems, organized by the Department of Electronics and Communication Engineering, Hindusthan Institute of Technology, Coimbatore, and held from 10–12 September 2025. The paper, co-authored by Deepak Saha, Lakshmipathi M, Brijesh N, Chandana Chitnis, and Dr. Vinu R., highlights advancements in vision-guided prosthetic systems with autonomous object interaction, underscoring impactful research in assistive technologies.

Prof. Jisy N. K, Assistant Professor, Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, has published a research article titled "A Comparative Study of Performance of Various Deep Learning Models and Their Explainability in Detection of Glaucoma" in IEEE Access (Q1 journal, Impact Factor: 3.6) on 6 November 2025. This work represents a significant research outcome developed in collaboration with BITS Pilani, Hyderabad Campus, and L V Prasad Eye Institute, Hyderabad, India. The article is co-authored by Prof. Sudha Radhika, Dr. Sirisha Senthil, and Prof. M. B. Srinivas, and contributes to advancing explainable AI techniques in medical image-based glaucoma detection



PUBLICATIONS

NAME	PAPER DETAILS
DR.ARUN BALODI	• Power-Efficient, Modular Rover Design for Multi-Purpose Exploration • Distance-Aware Bit-Mapping-Based Energy-Efficient MAC Protocol for LoRaWAN • A CNTFET-Based 10T Static Memory Design Immune to Read and Half-Select Disturbs for Low-Power Wearable Biomedical Systems • Analysis of different deformation shapes of flexible patch antenna • Analyzing the Evolution of Machine Learning Methodologies for Antenna Design through Structural Topic Modeling • Compact Burst Subaquatic Sonic Transmission Alert Variation and Realization Utilizing Profound Learning • Deep Neural Network-Based Classification of Spyware Populations Using Macroscopic Statistical Attributes of Operation Codes • Dual-Mode Robotic Arm Control System: Voice and Gesture Integration • Congestion-Aware and Delay-Aware Application-Specific Security Protocol for WSN/IoT • Optimal Controlling of Buck Boost Converter for the Charging of Electric Vehicle Using Anfis • Frequency Control in a SSSC enabled microgrid utilizing FOPID Scheme • Read Out Circuit for MEMS Capacitive Sensors: Capacitance to Voltage Converter
DR.ARUNGALAI VENDANN	• Sensor-Assisted Modeling and Prediction of Arc Dynamics in MIAB Welding Using Kolmogorov–Arnold Networks and Exponential-Trigonometric Optimization • Hybrid Two-Stage AI Pipeline for Bend Test Outcome Prediction in Magnetically Impelled Arc Butt Welding • Insights into Ultrasonic Welding of ABS-PC (Mycril) Polymers: Characterization and Performance Analysis • .Parametric Analysis using Pearson Heat Map on Ultrasonic Welding of PMMA Polymer Deployed for Structural Applications • Experimental investigations on the milling characteristics of Cu alloys and additively manufactured CuCrZr • Optimized Control Strategies for Robotic Arm in Rotational Welding: Modeling, Simulation, and Performance Analysis • Data Augementation Based Ensemble Learning Technique to Predict ARC Formation in MIAB Welding

PUBLICATIONS

NAME	PAPER DETAILS
DR.Theodore Chandra	• .Parametric Analysis using Pearson Heat Map on Ultrasonic Welding of PMMA Polymer Deployed for Structural Applications • A Conceptual Layered Security Framework for Streaming Scan Networks
DR.Pushpamala S	• Image Artifact Removal Using DnCNN in Low Bandwidth Wireless Communication • Enhancing Acoustic Data Analysis with the Burg Method: Results and Implications • Compact C-Shaped Patch Antenna for Next-Generation Wireless Networks
DR.Gayathri K M	• .A Comprehensive Assessment on Modular Technologies, Multiple Inverters, and the Constraints of Standalone Photovoltaic Systems
DR.Ashwin B M	• .Green Extraction of Protein from Peanut Meal: Valorization via High-Voltage Electric Discharge • Deep Learning-based QSAR Model for Therapeutic Strategies Targeting SmTGR Protein's Immune Modulating Role in Host-Parasite Interaction • Current Updates on Photoacoustic-Based Techniques for Breast Cancer Diagnosis

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NAME	PAPER DETAILS
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DR.ARUN ANANTHANARAYANAN	• A Secure Key Escrow Mechanism Using ECC for Distributed Mobile Networks and Cloud Services • A Lightweight Denoising Convolutional Neural Network for On-Device Artifact Suppression • Image Artifact Removal Using DnCNN in Low Bandwidth Wireless Communication • Enhancing 6G wireless performance through advanced MIMO techniques
DR.SNEHA SHARMA	• Medical and Biological Sensing with AI Driven Photonic Sensors

PUBLICATIONS

NAME	PAPER DETAILS
DR.MUKTI CHATURVEDI	• Sensor-Assisted Modeling and Prediction of Arc Dynamics in MIAB Welding Using Kolmogorov–Arnold Networks and Exponential-Trigonometric Optimization • Hybrid Two-Stage AI Pipeline for Bend Test Outcome Prediction in Magnetically Impelled Arc Butt Welding • Parametric Analysis using Pearson Heat Map on Ultrasonic Welding of PMMA Polymer Deployed for Structural Applications • Insights into Ultrasonic Welding of ABS-PC (Mycril) Polymers: Characterization and Performance Analysis • Optimized Control Strategies for Robotic Arm in Rotational Welding: Modeling, Simulation, and Performance Analysis • Data Augementation Based Ensemble Learning Technique to Predict ARC Formation in MIAB Welding
DR. NAVYA R	• Next-Gen Air Quality Index Forecasting with Hybrid Machine Learning Models and Cloud Synergy • Automated Wireless Charging System for Electric Vehicles Using Cloud Control • A Lightweight Denoising Convolutional Neural Network for On-Device Artifact Suppression • Image Artifact Removal Using DnCNN in Low Bandwidth Wireless Communication

PUBLICATIONS

NAME	PAPER DETAILS
DR.DIVYASHREE H.B	• Heart Disease Detection Using Fundus Imaging and Ml Algorithm • Robotic Operating System-Based Ground Control Station for Unmanned Aerial Vehicles • An Efficient Smart Agriculture Monitor System Using IoT • Improving the Efficiency of EMG-Based Prosthetic Arm Using EEG
DR. SUPRAJA EDURU	• A Novel Deep Multi-scale Convolutional Neural Network for Shockable and Non-shockable Arrhythmia Classification • Dual and wideband mmWave 28/38 GHz quad port MIMO antenna for 5G and beyond applications • Smart Traffic Management to Reduce Ambulance Delay • An Efficient Framework for Joint Context-Aware Based Melanocytic Tumor Analysis Using DRLBDaHViT and Deep CMLHP • Heart Disease Detection Using Fundus Imaging and Ml Algorithm • An Efficient Smart Agriculture Monitor System Using IoT
DR.SHIRSHENDU ROY	• A Novel Hardware Efficient FPGA Implementation of Multi-Linear Regression Algorithm • FPGA Implementation of Sigmoid, Hyperbolic Tangent and Softmax Functions using Efficient Architecture for Exponential Function • An Efficient Hardware Accelerator for Linear Discriminant Analysis Based Classifier • Low Cost FPGA Implementation of Convolutional Neural Network Based Image Classifier • An Efficient Smart Agriculture Monitor System Using IoT

PUBLICATIONS

NAME	PAPER DETAILS
DR. Rasmita Sahoo	• Performance analysis of the underwater optical wireless communication system under bioluminescence conditions
DR. Deepthi Chamkur V	• Robotic Operating System-Based Ground Control Station for Unmanned Aerial Vehicles • Novel machine learning-based game theoretic approach for wireless sensor networks
DR. OWAIS AHMAD SHAH	• Mitigating V-folding resonance shifts in flexible patch antennas through ground plane resizing • Smart Grid Cybersecurity: Anomaly Detection in Solar Power Systems Using Deep Learning • Temperature and Voltage Aware Evaluation of TSPC Flip-Flops with Application Oriented Design Insights • Energy-Efficient Buffer-Based Ternary SRAM Cell With Application to Image Processing • VLSI and Neural Networks Integration in Industry 4.0: A Comprehensive Approach • A CNTFET-Based 10T Static Memory Design Immune to Read and Half-Select Disturbs for Low-Power Wearable Biomedical Systems • Analysis of different deformation shapes of flexible patch antenna • Analyzing the Evolution of Machine Learning Methodologies for Antenna Design through Structural Topic Modeling • Coffee Adultration Detection Using NIR Spectrometry and Machine Learning

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Prof.Sudharsan V	• A Novel Hardware Efficient FPGA Implementation of Multi-Linear Regression Algorithm

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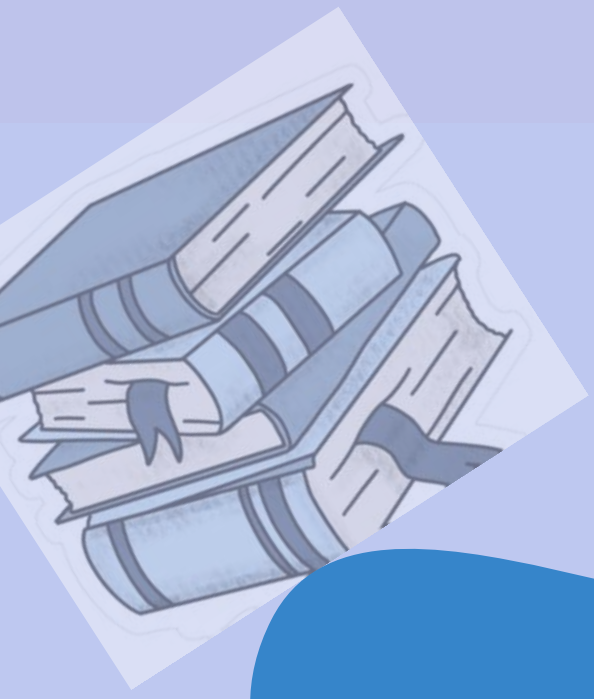

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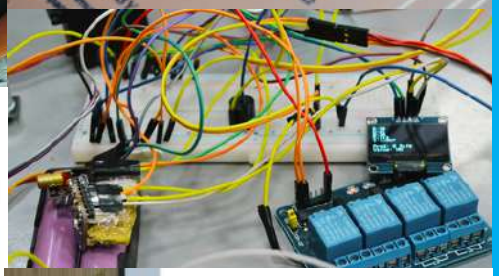
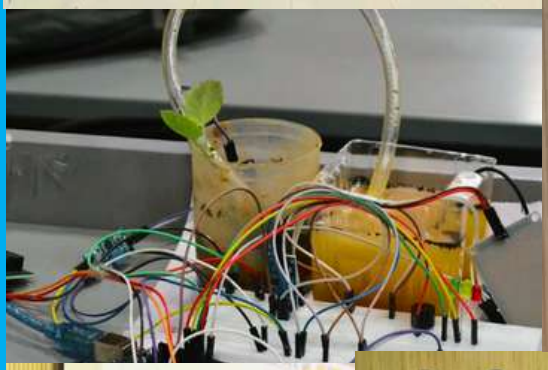












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