



DAYANANDA SAGAR
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ELECTROCLIPS

THE BIENNIAL MAGAZINE
OF ELECTRONICS

PRESENTED BY

ELECTROBLITZ CLUB

DEPARTMENT OF

ELECTRONICS AND COMMUNICATION

ENGINEERING



Insights

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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 self-teaching 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.

SCHOOL OF ENGINEERING

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DEAN'S DESK

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.



Dr. Udaya Kumar Reddy K R

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.

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.

Thank you for being an integral part of the Electronics and Communication Engineering Department. 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."

Wishing you a productive and fulfilling year ahead.



Dr. Arun Balodi

The Significance of Our Magazine: A Call to Action!

Dear community,

As we embark on another exciting chapter of the academic year, the Electroclips - biannual magazine of Electronics, editorial team would like to emphasize the importance of our department magazine and why your participation is crucial in making it a success.

Our magazine serves as a time capsule, documenting the vibrant and dynamic life in our department. It preserves the essence of our community, featuring stories, achievements, and experiences that define us as a collective. The magazine provides a platform to celebrate the accomplishments of our students, staff and alumni. It's a testament to the hard work and dedication that permeates every corner of our institution.

By actively contributing, you help us showcase the diversity of talents, perspectives, and backgrounds within our community. It's a medium through which we can learn about each other's journeys, projects, and endeavors, creating a stronger bond among us all.

Creating and contributing to the magazine is a tradition that builds over time. Each edition adds all the achievements, memories and stories of the past 6 months and becomes a valuable resource for current and future members of our community.

As members of the Electroclips editorial team, we encourage you to actively participate in this shared endeavors. Share your stories, achievements, and insights with us, so we can collectively create a magazine that truly represents the spirit of our department-ECE.

~ Editorial team



DEPARTMENT EVENTS

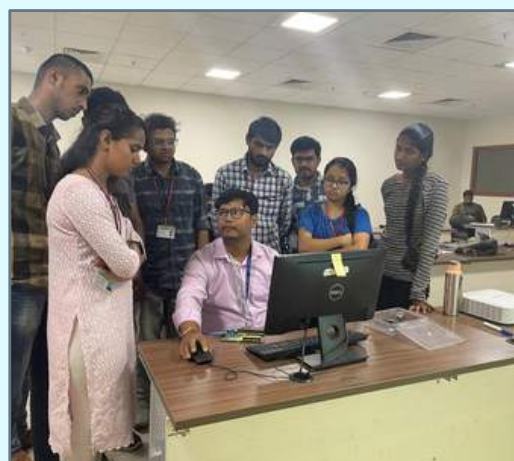
WORKSHOP ON 'ADVANCED FPGA IMPLEMENTATION USING VERILOG'

The Department of Electronics and Communication Engineering organized a Five-day workshop on 'Advanced FPGA Implementation using Verilog' for third-year and fourth-year students from 08.08.2023 to 12.08.2023.



The session was handled by internal and industry experts. Mr. Manish Agarwal, Lead RTL, and Verification, DXCorr Hardware Technologies delivered a session on insights of VLSI technology and its relevance in the industry and Dr. Subhrajit Mitra, RTL engineer, Brighways, India, delivered a talk on interfacing protocols and their importance.

The workshop was coordinated by Dr. Shirshendu Roy, Prof. Jisy N K and Prof. Shwetha M P, Assistant professor, ECE, DSU. Dr. Pushpamala S, Associate Professor, ECE DSU gave a talk on the concepts of System Verilog and FSM, Dr. Shirshendu Roy, Prof. Jisy N K and Prof. Shwetha M P, Assistant professor, ECE, DSU demonstrated a hands-on session on various circuits such as Filters, RAM, ROM, FSM and different device interfacing like a relay, Seven-segment display, ADC, DAC, etc. with FPGA.



TALK ON CHANDRAYAN-3



A technical talk on “**Insight Into Chandrayaan**” Journey from Chandrayaan 2 to Chandrayaan 3 was organized by Department of ECE, SoE on 23/8/2023.

The talk was delivered by Dr V.V. Srinivasan, Outstanding Scientist, Ex-Director, ISTRAC/ISRO. Students of 7th semester ECE had participated along with few faculty.

The event was coordinated by Prof. Nandini Rao G, Assistant Professor, Dept. of ECE, SOE,DSU.



PLACEMENT TRAINING - 2025 BATCH

The Department of Electronics and Communication Engineering, in conjunction with the Placement Department, successfully conducted a comprehensive Placement Training session on Corporate Soft Skills for the 2025 batch of 5th-semester students on September 25, 2023, from 9:00 AM to 4:00 PM.



Corporate Soft Skills encompass a wide range of essential skills, including leadership, project management, negotiation, conflict resolution, time management, emotional intelligence, and strategic thinking. These skills are vital for students as they prepare for their future careers and academic pursuits.

Approximately 160 students attended the program, where they received training on various aspects of soft skills, including personality development, teamwork, problem-solving abilities, adaptability to change, and other crucial elements to enhance their readiness for the job placement process.

NAAC AWARENESS



The Department of ECE conducted an awareness program on “NAAC Awareness” held on 5th September 2023, organized by Dr. Theodore C and Dr. Saara K. The Speaker, Dr. Gayathri K M gave an insight on understanding of NAAC (National Assessment and Accreditation Council), its role in assessing and accrediting higher education institutions, and its significance in maintaining quality education.

MOU BETWEEN SAMARA NATIONAL RESEARCH UNIVERSITY, BANGALORE AND DSU

The signing of a Memorandum of Understanding (MOU) between and DSU on December 9, 2023, is a significant development in fostering international collaboration and academic partnerships. Such agreements typically signify a commitment to cooperation in various academic and research endeavors, including student exchanges, joint research projects, and faculty collaborations.

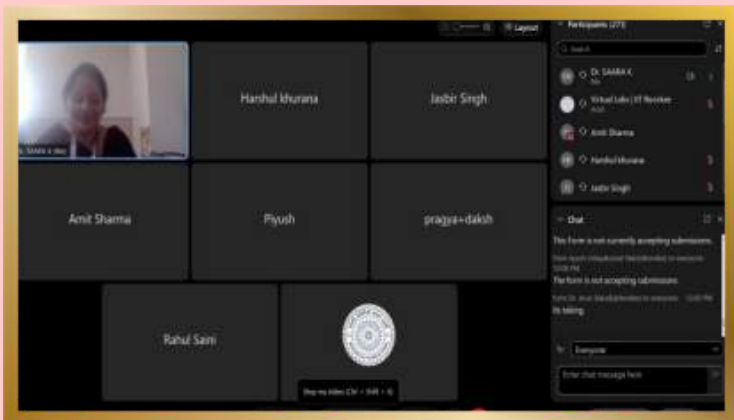
This step towards global collaboration not only enriches the academic experience for students but also enhances the research capabilities and global perspectives of both institutions.



VIRTUAL LABS WORKSHOP

Virtual lab is an initiative of Ministry of Education under the National Mission on Education through ICT. It provides a complete learning management system where the students can avail the various tools for learning, including additional web sources, video lectures, animated demonstrations and self - evaluation.

Virtual lab provides remote access to Labs in various disciplines of Science and Engineering. The 6th workshop on “Virtual Labs” was conducted on 13th October 2023 by the Department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University, Bengaluru in collaboration with Electrical Engineering Department, IIT Roorkee.



The objective of this workshop is

1. To provide remote-access to Labs in various disciplines of Science and Engineering. These Virtual Labs would cater to first year students at the undergraduate level of ECE, CSE, AIML, DS, CY, CST, ME, AE and BCA.
2. To enthuse students to conduct experiments by arousing their curiosity. This would help them in learning basic and advanced concepts through remote experimentation.

The mode of conduction of the workshop was Webex platform with YouTube live streaming. The number of Active participants for the sessions were 930 third year Students of DSU. The workshop consisted of sessions handled by eminent resource persons: including Mr. Amit Sharma Mr. Pankaj Saini Mr. Nipun Jain from IIT Roorkee. The workshop was organized by Dr. Saara K, Nodal coordinator of Virtual labs.

CAREER COUNCELLING - GATE EXAM

The GATE Exam Awareness Technical Workshop, organized on 19th October 2023, aimed to provide students with crucial insights and knowledge about the Graduate Aptitude Test in Engineering (GATE) exam. The event garnered remarkable attention, witnessing an impressive turnout of 3rd year students. Mr. Vipin Kumar Mishra, from IMS Gate Academy Bangalore, an esteemed expert in the field, served as the resource person, enriching the workshop with his valuable expertise. Mr. Vipin Kumar Mishra conducted comprehensive technical sessions covering various GATE exam topics, problem-solving techniques, and time management strategies.



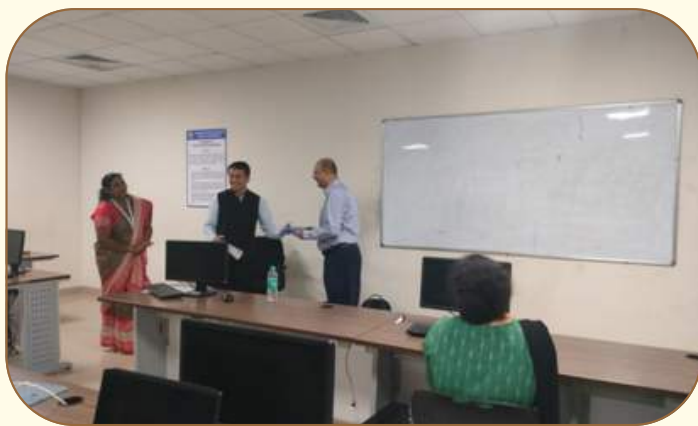
Real-life examples and case studies were used to illustrate complex concepts, enhancing students' understanding and confidence. Engaging question-and-answer sessions allowed students to clarify doubts and interact directly with the resource person. Mr. Mishra patiently addressed queries, providing in-depth explanations and insights. Motivational Talk: An inspirational talk motivated students to set ambitious goals, work hard, and stay determined throughout their GATE exam preparation. Personal success stories shared by Mr. Mishra resonated well with the attendees, fostering a positive mindset.



INFINITE HORIZONS: CLUSTER COMPUTING WORKSHOP (HANDS-ON)



The Cluster Computing Workshop was jointly organized by the Computer Science and Engineering (CSE) Cluster and the Electronics and Communication Engineering (ECE) Department. The workshop, held on 27th October 2023 at DSU, Kudlu Gate, Bangalore was made possible through the collaborative efforts of Dr. Amit Bhatt, Pro Vice Chancellor, DSU who played a key role in arranging the esteemed resource person, Dr Amit Mankodi, Arm Ltd. The active participation of the staff and students contributed significantly to the workshop's success.



The workshop, explored various facets of cluster computing. Participants were introduced to cluster technology and its real-world applications. Hands-on sessions covered the building of Beowulf clusters using traditional PCs and Raspberry Pi devices. Practical demonstrations and interactive sessions illustrated applications execution on clusters. The agenda also included detailed tutorials on setting up master/server nodes, configuring compute/slave nodes, and writing/testing application code.

NDA BETWEEN INFAB-CENSE IISC AND DSU

The signing of Non-Disclosure Agreements (NDAs) between INFAB-Bangalore and Dayananda Sagar University (DSU), as well as INFAB-CeNSE IISC and DSU, indicates a commitment to confidentiality and collaboration in specific areas. The NDA between INFAB-Bangalore and DSU suggests a collaborative effort, possibly in research, development, or some other strategic partnership where both parties are sharing confidential information.

VISIT TO ISTRAC

The department of Electronics and Communication Engineering, School of Engineering, Dayananda Sagar University had organized an industrial visit to ISRO telemetry tracking and command network at Baylalu on 31st October 2023. Sri Sankar Madhaswami, Manager, HRD, ISRO welcomed the students and explained us the basic Motto of ISRO : Service to mankind. He also showed different centers in India and their functions such as URSC, MCF Hassan , NRSC.



He gave information about different types of launch vehicles and insights on Chandrayaan 2, Chandrayaan 3 also on Mars Orbit Mission.

Then junior scientists from ISRO described the main function of data center, how the images will be captured by high resolution optical cameras and so on. Students were fascinated by the navigation system developed at ISRO that is NAVI-C. And then the 18m antenna and 32m antenna, which are of very high directivity and user beam waveguide were shown. During this visit, the engineers discussed the complete downlink communication system. Along with, students were also informed about career opportunity in ISRO. In total 80 students of 7th semester and two faculty visited the ISTRAC campus. Mrs. Nandini Rao G and Dr. Sneha Sharma coordinated the industrial visit to ISTRAC.

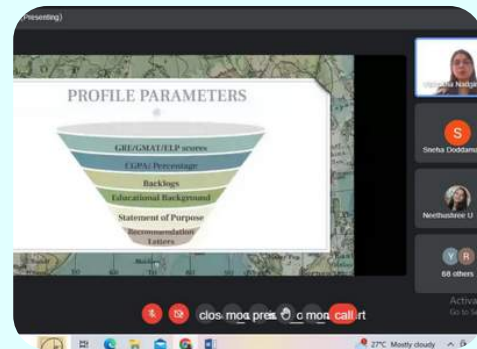
Key Takeaways:

- Knowledge on Cryogenic devices to lower thermal noise.
- Knowledge on Cassegrain antennas



WEBINAR ON BEYOND BOUNDARIES

The Department of Electronics and Communication Engineering organized a webinar titled "Beyond Boundaries - Explore Your Global Education Journey" on 23rd November 2023. Ms. Shruti Kulkarni, a distinguished senior counselor from Texas Review, graced the event as the key speaker.



Ms. Kulkarni provided valuable insights into education methodologies that emphasize the development of students' understanding of diverse cultures, global history, current events across the world. She also highlighted the importance of studying abroad, covered requirements and international tests, explained application processes for major countries, discussed scholarships, profile building, visa procedures, and post-education career opportunities.

WORKSHOP ON MICROWAVE ENGINEERING AND ANTENNA

IEEE sponsored two-day workshop on microwave engineering and antenna design was organized on 8th and 9th December, 2023 by CSST in DSU for the benefit of ECE students, from all the three Campuses.

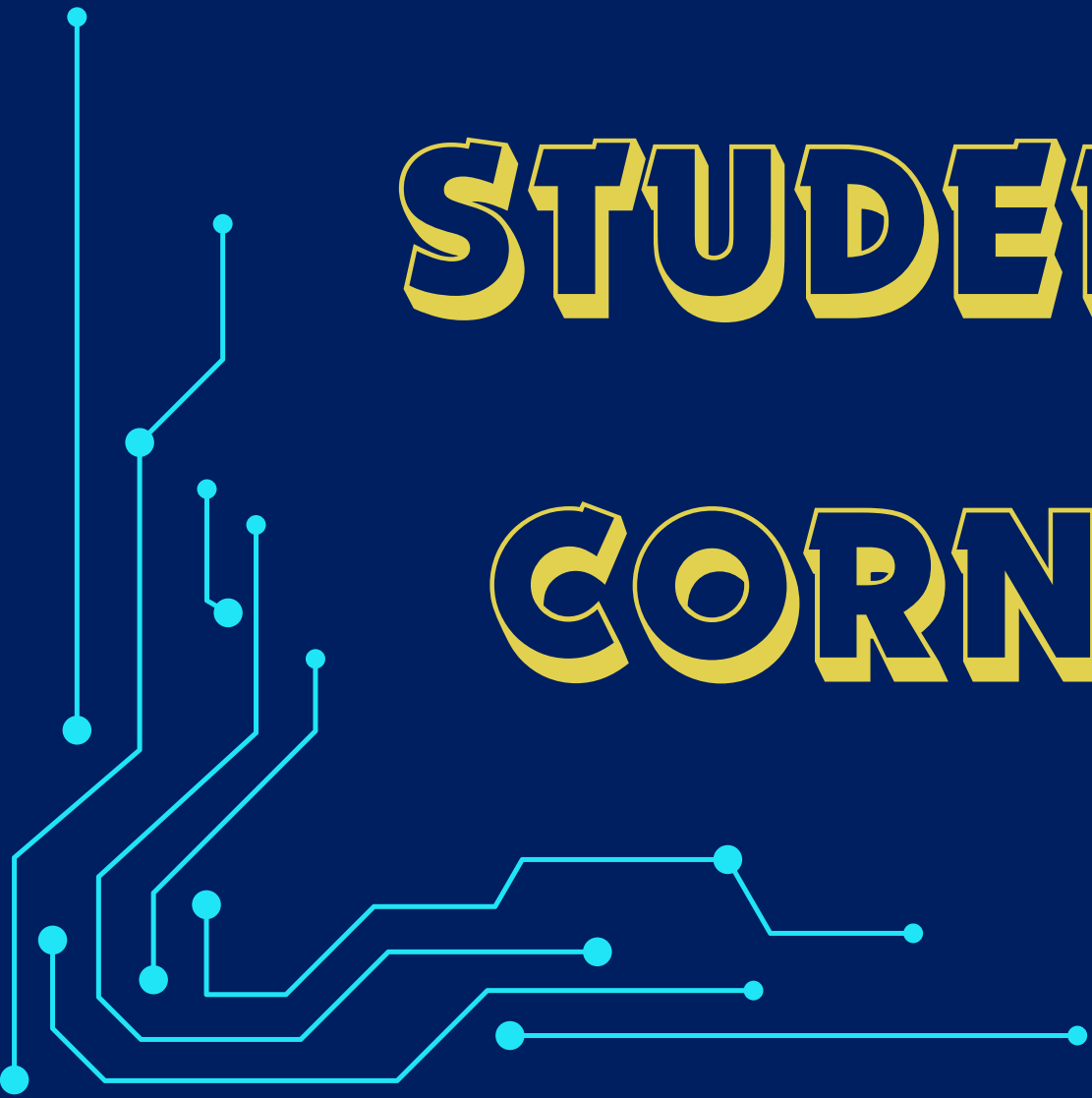
Workshop on microwave engineering & antenna design was inaugurated on 8th December by Dr. V Sambasiva Rao, former group director, communication systems group, U.R. RAO SATELLITE CENTRE (URSC), ISRO, Bangalore. Honorable Vice Chancellor of DSU, Dr. K N B Murthy presided the inaugural event.



Knowledgeful talks on various topics of microwave and antenna design were organized in the morning sessions, few session were handled by Mrs. Nandini Rao G and Mrs. Manasa K R and in the afternoon, students were introduced to hands on lab experiments. Dr. Hariharan V K and CSST team had coordinated the whole workshop.



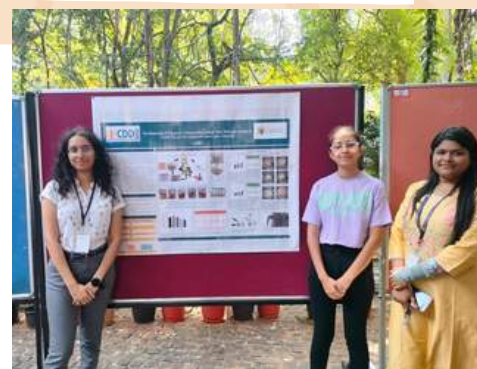
STUDENTS CORNER



Poster Presentation In CDD

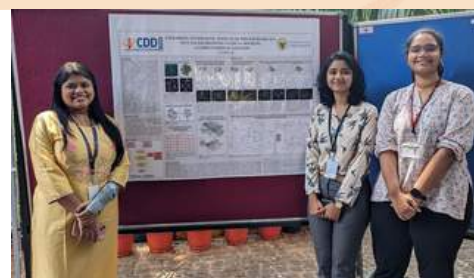
Students from the Syntech Bio Solutions Lab at Dayananda Sagar University, under the guidance of Dr. B.M. Ashwin Desai from the Department of Electronics and Communication Engineering (ECE-SOE) and Dr. Pronama Biswas from SBAS, showcased their interdisciplinary research at the CDD 2023 conference.

The first poster, titled "Development of Polymeric Nanoparticles Loaded with *Withania somnifera* Crude Extract for Enhanced Anti-Cancer Therapy," presented the synthesis of nanoparticles with the potential to improve cancer treatment outcomes. The project emphasized the polymeric encapsulation of crude extracts from the *Withania somnifera* plant, which is recognized for its anti-cancer properties.



The second research poster, "Development of polyvinyl alcohol (PVA) nanofibers functionalized with crude extracts of *Moringa oleifera* for wound healing," described the engineering of PVA nanofibers incorporating extracts from the *Moringa oleifera* plant. The aim is to utilize the plant's known healing properties to accelerate the wound healing process through the application of nanotechnology.

Lastly, the research titled "Exploring Synergistic Effects of Phytochemicals on Cancer Proteins via Dual Docking: A Computational Analysis" delved into the computational study of phytochemical interactions with cancer proteins. The study focused on the dual docking method to understand the potential synergistic effects that can enhance therapeutic efficacy against cancer.



Hackathon Winner-2023

I am pleased to share the success story of our team, ICARUS, in the recently concluded National Level Smart India Hackathon December 2023. The event, organized nationwide, aimed to bring together innovative minds to address real-world challenges using cutting-edge technologies. Our team participated in a problem statement presented by Autodesk, which involved developing a glass cleaning robot for high-rise buildings using Industry 4.0 and IoT solutions.

The event spanned multiple rounds, with an initial pool of 250 entries from various institutions across the country. Following a rigorous evaluation process, our team emerged victorious, securing a position in the final round alongside four other exceptional teams. The nodal center for our team was VVCE Mysore, and we are proud to have represented our institution on a national platform.

I, Ashrith T Hegde, served as a crucial member of our 6-member team, taking on the responsibility of PCB designing for various electronic components integral to the functionality of the glass cleaning robot. This involved designing and optimizing circuitry for seamless integration with Industry 4.0 and IoT technologies, ensuring the efficiency and reliability of our robot.

Our innovative solution not only met the requirements of the problem statement but also showcased the potential of Industry 4.0 and IoT in addressing real-world challenges. The glass cleaning robot we developed not only demonstrated advanced technological capabilities but also emphasized the practical application of these technologies in the context of high-rise buildings.

The final round, which included only five teams, was a highly competitive arena where our solution stood out for its ingenuity, functionality, and practicality. Our success is a testament to the dedication, hard work, and collaborative efforts of our entire team.

We extend our gratitude to Autodesk for presenting such a challenging problem statement and providing an opportunity for us to showcase our skills and creativity.



GOLD MEDAL -2023



An accomplishment is being flavoured in Dept. of ECE. Revathi R was awarded a Gold medal for securing 9.13 CGPA on 8th Annual Convocation of DSU , October - 2023

PLACEMENTS



Highest package
Harshitha Divakar
23.44 LPA



Cognizant

Continental

ABB

Capgemini

Mindtree
A Larsen & Toubro Group Company

Program	Placed Percentage	Average Salary Package
B.Tech	65.5%	5 LPA
B.Voc	97.5%	4 LPA

EB
Elektrobit



brillio

TATA ELXSI

accenture



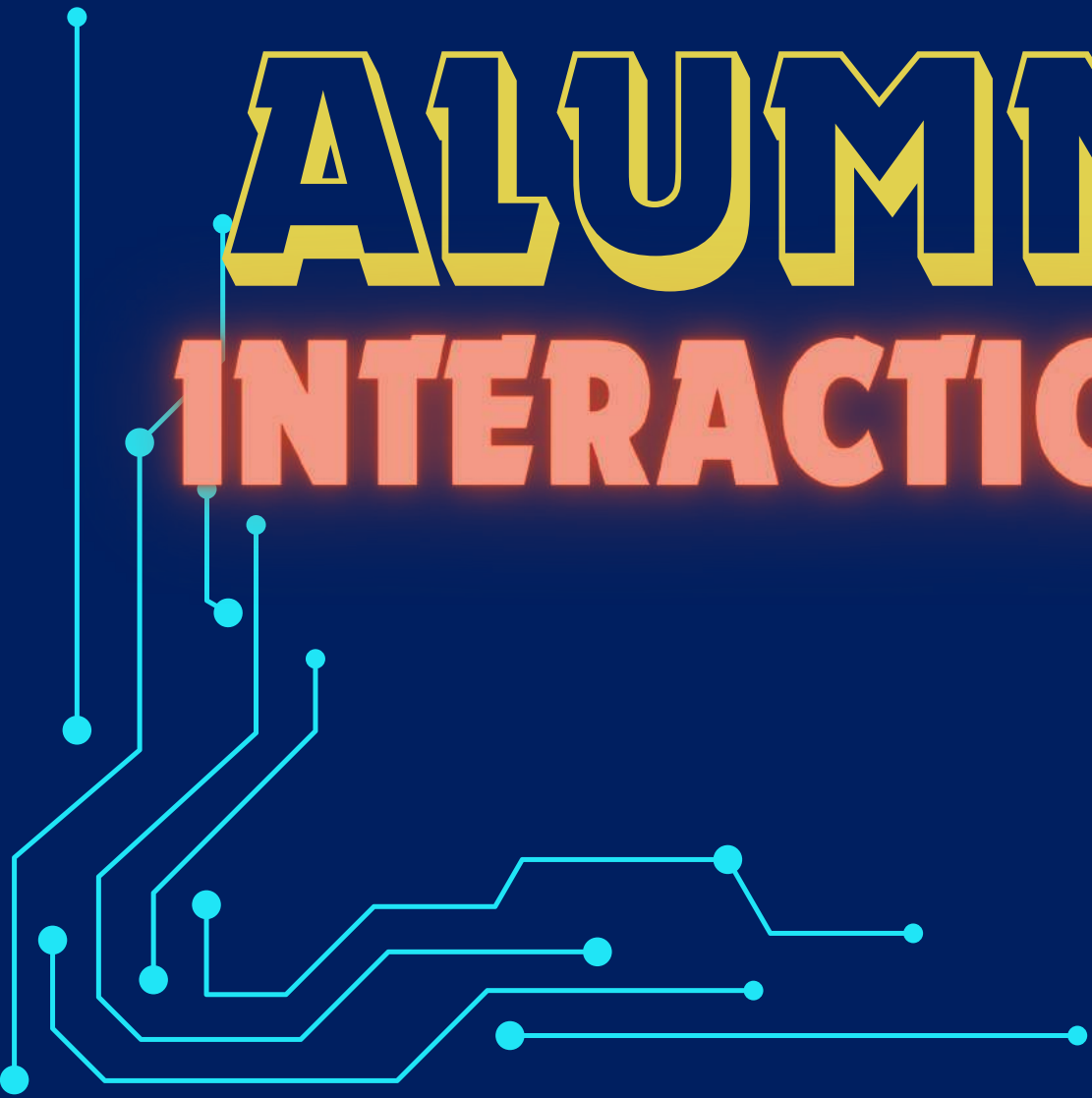
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ALUMNI INTERACTIONS



SHAPING TOMORROW: ECE CAREERS, SEMICONDUCTORS AND HIGHER EDUCATION

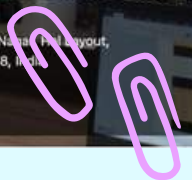
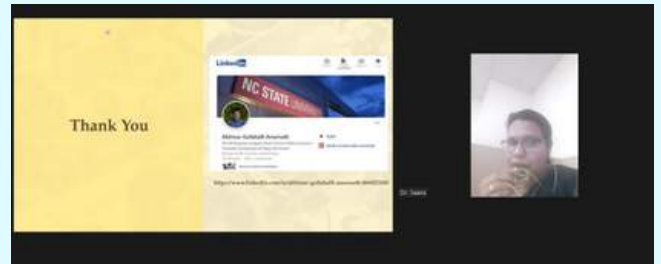


A webinar on shaping tomorrow: ECE careers semiconductors and Higher education was organized by the Electronics and Communication Engineering (ECE) Department.

The workshop was held on 20th November 2023, the resource person was our alumnus Mr. Abhinav Gullahalli Amarnath, Soc Engineer, Apple, USA. The webinar was organised by Dr. Saara K, Associate Professor ECE. The coordinators of the event are Dr Vinu R and Prof. Sivasankari S S.



The webinar explored various opportunity for the ECE graduates. Participants were introduced to various careers related to ECE domain like Electronics and Hardware Design, Telecommunications, Software Development, Robotics and Automation, Data Science and Artificial Intelligence. The agenda also included about Semiconductor Industry Overview and Wide Aspects of Semiconductor Industry. The students were given the detailed route map for doing Masters in the USA. Application Process, Financial Considerations like Scholarships and Assistantships and also Work Opportunities





FACULTY

CORNER

INVITED TALK

Dr. Arun Balodi, Professor and Chairman, Department of ECE delivered various sessions including

- The Faculty Development Program on "Recent Trends in Deep Learning & Large Language Models" Jointly organized by E&ICT Academy IIT Roorkee and Delhi Technical Campus, Greater Noida on 10 October 2023.
- "Image Processing in Damage Detection" in AICTE Training and Learning (ATAL) Academy Initiative; Faculty Development Program (FDP) organised Mechanical Engineering Department, K.K.Wagh Institute of Engineering Education and Research Nashik-03 on 30 November 2023.



- Session Chair in the 2023 IEEE Technology & Engineering Management Conference - Asia Pacific (TEMSCON-ASPAC) today on 15-12-2023.
- Technical Program Committee Member for 2023 the 4th International Conference on Advanced Electrical and Energy Systems (AEES) to be held in Shanghai, China from December 1-3, 2023.
- A two-week online refresher course on "Development of ICT Skills for Implementation of NEP-2020" Organized by UGC-Human Resource Development Center, B.P.S. Mahila Vishwavidyalaya, Khanpur Kalan, India.
- A talk on "Ethics of Technical Research Writing and use of AI Tools" organized by Research and Development Cell, Anil Neerukonda Institute of Technology & Sciences (ANITS), Visakhapatnam, India on 29-12-2023.

INVITED TALK



Prof. Abhinav Karan delivered a lecture on embedded programming from 13/11/23 to 17/11/23, organized by PAL India Computer Training Pvt. Ltd and training held at Indian Air Force, Bangalore.

Prof. Sharanbasavaraj delivered a lecture on CCTV Monitoring system on 16th October 2023 at DSU, On- the-Job Training (OJT) Program For Employees of Strides Pharma Science Limited, Bengaluru.



Ph.D. AWARDED

Under the guidance of Dr. Saara K, three Ph.D. scholars at DSU successfully completed their doctoral studies and awarded Ph.D on 28th October 2023, marking a moment of pride and accomplishment. The journey involved rigorous research, intellectual exploration, and a collaborative effort to contribute valuable insights to their respective fields. As a mentor, witnessing their dedication and scholarly growth has been immensely rewarding.

This accomplishment not only reflects the scholars' commitment but also underscores the supportive academic environment at DSU. It is a testament to the collaborative spirit that drives excellence in research and education.



Under the guidance of Dr. Gayathri K M, Ph.D. scholar successfully completed her doctoral studies and awarded Ph.D on 28th October 2023 at DSU.

RESEARCH FUNDING

An accomplishment is being flavored in the Department of Electronics and Communication Engineering Dr. B M Ashwin Desai has been awarded a funded project from SERB-DST of Rs. 31,25,150/- for the project titled “Investigation and optimization of factors influencing the high voltage electrical discharge-based extraction of protein from peanut meal”



India is the second largest producer of peanuts (*Arachis hypogaea* L.) worldwide with more than 10 million metric tonnes produced yearly. A major part of this produce is used for producing edible oil and the by-product of this oil extraction process is referred to as peanut meal. This peanut meal is mainly used for feeding livestock and currently lacks proper valorization. Peanut meal is a nutrient-dense by-product, it contains nearly 40-50% protein with essential amino acids and is a suitable inexpensive candidate for protein fortification.

The proposed research aims to investigate and optimize the high voltage electrical discharge-based extraction of protein from peanut meal, which has the potential to promote waste valorization and provide an inexpensive protein source, by carefully designing experimental protocols and comparing the HVED technique with conventional and non-conventional methods.

RECOGNITIONS



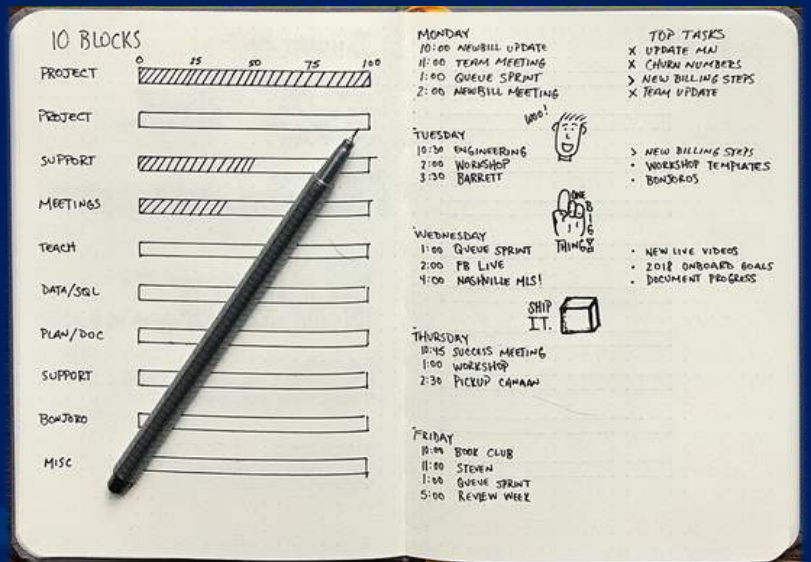
Dr. Pushpa Mala S, as a representative of Dayananda Sagar University (DSU), has showcased an exemplary commitment to leadership and excellence, both within and beyond the university's borders. Serving on the IEEE Executive Committee (EXECOM) for the Bangalore Section in 2023, she demonstrated her prowess by seamlessly navigating the intricate world of technology.

As the IEEE Women in Engineering Treasurer from 2023 to till date, and the Chair for IEEE TEMS 2024, Dr. Pushpa Mala has been a trailblazer, fostering diversity and inclusivity in the realm of technology. Her influence extends globally as the Finance Chair for the IEEE TEMSCON ASPAC 2023 Conference, held for the first time in India at the prestigious Hotel Sheraton.

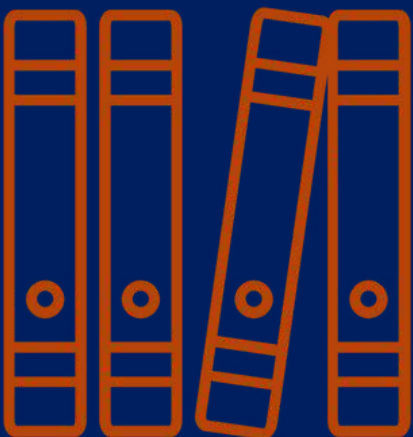
Dr. Pushpa Mala's leadership continued to shine as the Publication Chair for the IEEE Conference at RNSIT to be held in future, where her guidance facilitated the presentation of cutting-edge research and technological advancements. Beyond conferences, she has taken on pivotal roles in academia, serving on Boards of Examiners (BOE) at RVCE, Boards of Studies (BOS) at BNMIT, and contributing to the VTU External PhD Committee at various esteemed institutions.

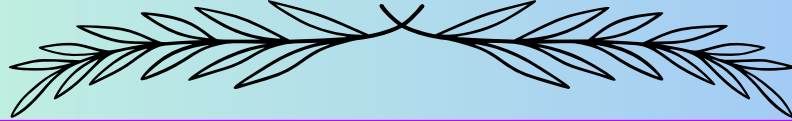


Her active participation in national and international events is evident through her attendance at the R10 Symposium in Goa and roles as a Session Chair for IEEE CONECCT-Bangalore Section and VLSI SATA- Amrita School of Engineering. She is also seen in her role as the Finance Chair for ICWITE at Vemana IT and her involvement in the successful organization of the **IEEE Bangalore Section** CodXpress, the first-ever section-level **hackathon**, to enhance students' problem-solving skills in various domains, across section and subsections in Karnataka. Her knowledge dissemination is exemplified through her invited talks at TVS Motors Ltd, Hosur & JNNCE, Shivamogga, and as a speaker for a SERB-sponsored workshop at CDAC. She conducted a Mid Managers Training Program for Industry at Hotel Chancery Pavillion, funded by IEEE TEMS HQ, USA, highlighting her dedication to industry collaboration and professional development. Her commitment to nurturing future talent is evident through her roles as the Chair of Mock Interview training programs for students across Karnataka. In summary, Dr. Pushpa Mala's multifaceted contributions, both within DSU and in the broader national and international IEEE community, underscore her as a visionary leader and a catalyst for positive change in the ever-evolving landscape of technology and academia. She also been presented an Academic Excellence Award- 2023 by IEEE Bangalore section.



PUBLICATIONS



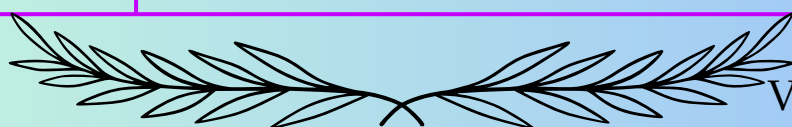


#	Faculty Name	Research Article
1	Dr. Puttamadappa C	Bhattacharya D, Puttamadappa C. 2023. PID-FUZZY Control System for Autonomous Underwater Vehicles (AUV): Highly Accurate FPGA Implementation. Philipp J Sci 152(3): 999–1006.
2		Anitha Suresh, Puttamadappa C, Manoj Kumar Singh, "Optimization of Thinned Circular Antenna Array Pattern using Dynamic Differential Evolution" International Journal of Electronics and Communication Engineering Volume 10 Issue 5, 129-138, May 2023
3		Sunil Kumar, C., Puttamadappa, C. & Chandrashekar, Y.L. Power Quality Improvement in Grid Integrated PV Systems with SOA Optimized Active and Reactive Power Control. J. Electr. Eng. Technol. 18, 735–750 (2023).
4		Anitha Suresh, C. Puttamadappa, Manoj Kumar Singh, "Thinning Approach based on Sides Lobe Level Reduction in the Linear Array Antenna using Dynamic Differential Evolution," SSRG International Journal of Electrical and Electronics Engineering, vol. 10, no. 2, pp. 61-74, 2023. Crossref,
5		Nisha Mary Joseph, Puttamadappa C., "Highly Accurate Technique for CO-OFDM Channel Estimation Technique Using Extreme Learning Machine (ELM)," WSEAS Transactions on Electronics, vol. 14, pp. 7-23, 2023,
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8	Dr. Arungalai Vendan & Dr. Mukthi Chaturvedi	Chaturvedi, M. and Arungalai Vendan, S. 2023. Simulation Study of Critical Aspects of MIAB Welding for Analysis of Potential Factors Governing the Performance of Weld Formation. Annals of "Dunarea de Jos" University of Galati. Fascicle XII, Welding Equipment and Technology. 34, 1 (Dec. 2023), 49-56.
9		Chaturvedi, Mukti, Arungalai Vendan Subbiah, George Simion, Carmen Catalina Rusu, and Elena Scutelnicu. 2023. "Critical Review on Magnetically Impelled Arc Butt Welding: Challenges, Perspectives and Industrial Applications" Materials 16, no. 21: 7054.
10	Dr. Rupam Bhaduri	Rupam Bhaduri, "Studies on Single and Double Actuator Based DC Attraction Type Levitation Systems: Optimization Techniques"- IGI Global publications, ISBN13: 9781668473887 July, 2023, DOI: 10.4018/978-1-6684-7388-7
11	Dr. Saara K	Ranjith B. Gowda, P. Sharan, K. Saara (2023), "1-Dimensional silicon photonic crystal pressure sensor for the measurement of low pressure," Results in Optics, Elsevier Journal, https://doi.org/10.1016/j.rio.2023.100352 . doi.org/10.1016/j.rio.2023.100352.





12	Dr. Saara K	Prakruthi H. L., Saara K (2023), "Analytical modelling, fabrication and characterization of a 3-DOF MEMS gyroscope based on UV-LIGA process", Journal of Optics, Springer, https://doi.org/10.1007/s12596-023-01258-y .
13		Prathap PB, Saara K (2023) "Self-Compensating Gold-Encapsulated Tilted Fiber Bragg Grating for Peak Tracking based Biosensing Applications", Journal of Optics, Springer, doi.org/10.1007/s12596-023-01369-6 .
14		Prathap PB, Saara K (2023) "Quantifying Efficacy of the Fiber Bragg Grating Sensors in Medical Applications: A Survey" https://doi.org/10.1007/s12596-023-01480-8 .
15		Ranjith B. Gowda, P. Sharan, K. Saara (2023), "Numerical modelling of 1- dimensional silicon photonic crystal sensor for hydrostatic pressure measurement," Zeitschrift für Naturforschung A, https://doi.org/10.1515/zna-2022-0261 .
16		Ranjith B. Gowda, P. Sharan, K. Saara (2023), "Highly Sensitive Temperature Sensor using One-Dimensional Bragg's Reflector for Biomedical Applications," Biomedical Engineering/Biomedizinische Technik (BMT), doi.org/10.1515/bmt-2022-0482 .
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19		Suchandana Mishra, V. Sharmili, Sneha S., Saptha Sree M., Preeta Sharan, Saara K (2023), "Numerical Analysis for Flat Wheel Detection at Different Wagon Load," 978-93-80544-47-2/23/@BVICAM, New Delhi, India, (INDIACom).
20		Dr. Pushpa Mala S
21	Pushpa Mala S, Prajwal Raju, Poojashree, Raghaveshwar Hebbar, Vineet Bendre, Manasa K R," Underwater Fleck Detection using Computer Vision", J. Inst. Eng. India Ser. B (Nov 2023), Springer	
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25	Dr. Gayathri K M	Chinnu Mary George, Gayathri K M, Reeja S R, "Hybrid Optimization Enabled Routing Protocol for Enhancing Source Location Privacy in Wireless Sensor Networks", International Journal of Computer Networks and Applications (IJCNA), 10(1), PP: 51-67, 2023, DOI: 10.22247/ijcna/2023/218511.
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29		Gupta, S., Kumar, D., Chaudhary, V.S., Sharma, S. (2023). Double-Core Photonic Crystal Fiber for Liquid Sensing Detection. In: Nagaria, R.K., Tripathi, V.S., Zamarrano, C.R., Prajapati, Y.K. (eds) VLSI, Communication and Signal Processing. VCAS 2022. Lecture Notes in Electrical Engineering, vol 1024. Springer, Singapore. https://doi.org/10.1007/978-981-99-0973-5_64
30		D. N., S. Sharma, H. N. Gayathri, P. Sharan, R. BR and A. G. Bhat, "FEM Analysis of Railway Brake Disc for Safety of Train," 2023 10th International Conference on Computing for Sustainable Global Development (INDIACom), New Delhi, India, 2023, pp. 316-320Yu-Lin Chen ^{1,2} , Wen-Kuan Yeh ^{1,3} , Heng-Tung Hsu ¹ , Ke-Horng Chen ² , Wen-Chin Lin ⁴ , Tien-Han Yu ¹ , Hung-Ting Chou ⁵ , D Godwin Rajó and D Godfrey," Hot Carrier Injection Reliability of Fabricated N- and P-Type Multi FinFETs with Different TiN Stacks", ECS Journal of Solid State Science and Technology, Volume 12, Number 3, DOI 10.1149/2162-8777/acc138.
31		Yu-Lin Chen ^{1,2} , Wen-Kuan Yeh ^{2,3} , Ke-Horng Chen ¹ , Heng-Tung Hsu ² , Chin-Tsai Hsu ³ , D Godwin Raj ⁴ , Hung-Ting Chou ⁵ , Jui-Sheng Wu ⁶ , Tien-Han Yu ¹ and D Godfrey Hot Carrier Injection (HCI) Reliability of Fabricated Y-gate HEMT with Various Top Length, ECS Journal of Solid State Science and Technology, Volume 12, Number 3, DOI 10.1149/2162-8777/acbe19
32	Dr. Godfrey	Zhen, YL., Yeh, WK., Hsu, HT, D Godfrey. et al. The Impact of Hot Carrier Injection-Induced Device Degradation for Lower-Power FinFETs. J. Electron. Mater. 52, 1391-1399 (2023). https://doi.org/10.1007/s11664-022-10087-x
33		Yu-Lin Chen ^{1,2} , Wen-Kuan Yeh ^{2,3} , Ke-Horng Chen ¹ , Heng-Tung Hsu ² , Chin-Tsai Hsu ³ , D Godwin Raj ⁴ , Hung-Ting Chou ⁵ , Jui-Sheng Wu ⁶ , Tien-Han Yu ¹ and D Godfrey Hot Carrier Injection (HCI) Reliability of Fabricated Y-gate HEMT with Various Top Length, ECS Journal of Solid State Science and Technology, Volume 12, Number 3, DOI 10.1149/2162-8777/acbe19
34	Dr. Shishendu Roy	Sowmya, Nagavarapu; Kumar, Jitendra; Biswal, Pradyut K.; Roy, Shirshendu; Pradhan, Subhrajit, Neuromorphic Processor Design and FPGA Implementation for Handwritten Digits employing Spiking Neural Network International Journal of Computing and Digital Systems Volume 14 Issue 01. http://dx.doi.org/10.12785/ijcds/140152
35		Advanced Digital System Design: A Practical Guide to Verilog Based FPGA and ASIC Implementation Shirshendu Roy Springer Nature





ELECTROBLITZ

CLUB

ELECTROBLITZ CLUB

VISION

To enrich the creative young minds in learning, leading and living effectively in the advanced global society by providing collaborative platform for innovative programs and celebration of traditional values.

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 the technical skills and personality development of the student apart from academics.

MISSION

To align all interested students, club facilitate students to interact with alumni and professionals in their fields of interest.

To enrich student's experience, create a diverse community, encourage, and provide opportunities for students to build valuable skills.

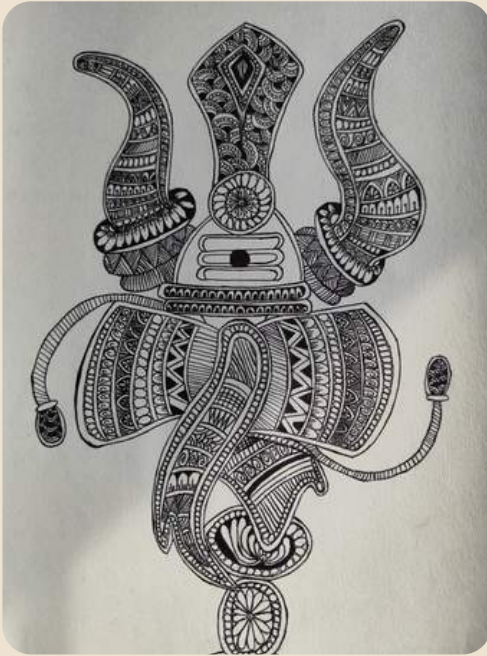
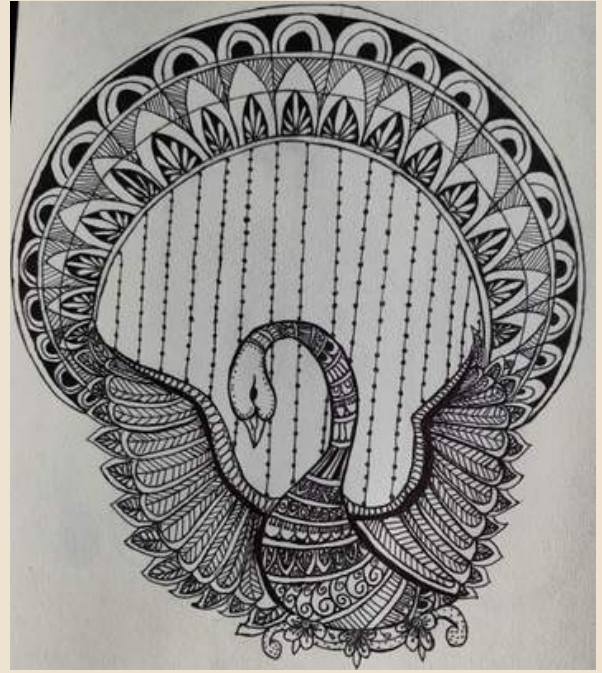
To bring out the hidden potential of students apart from academics, in order to adopt themselves to the challenges in the current scenario running in the field of electronics or interdisciplinary Spectrum.





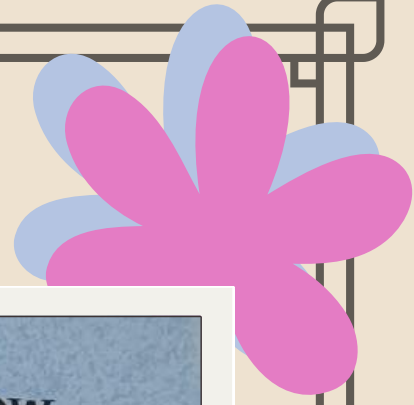
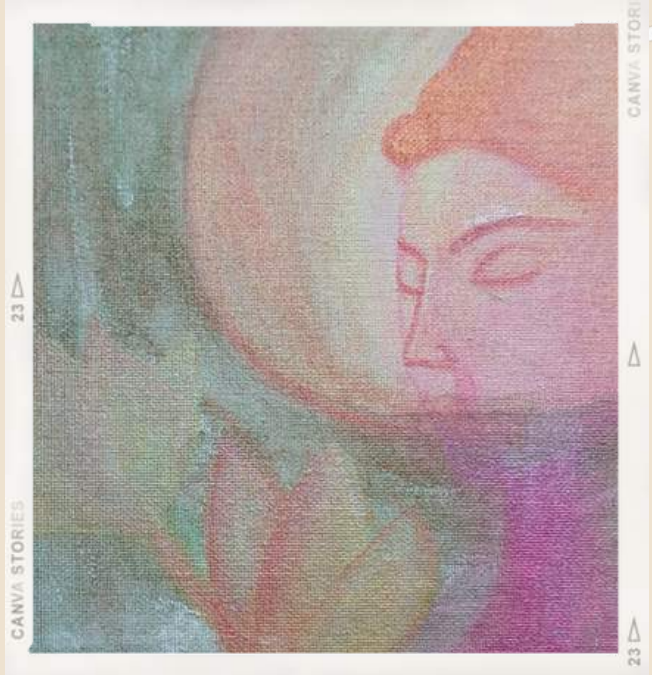
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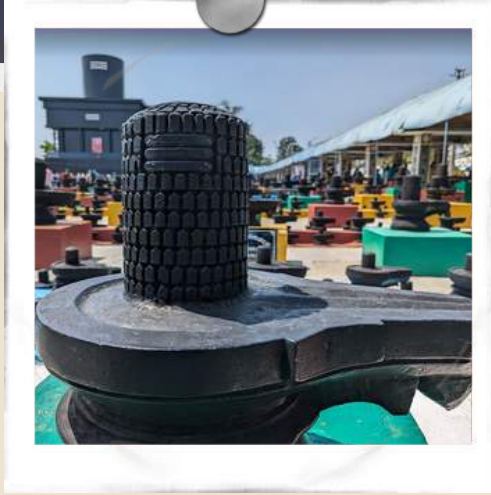
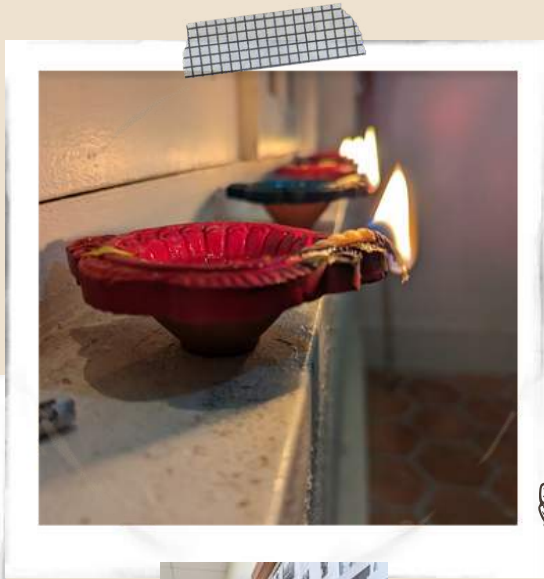
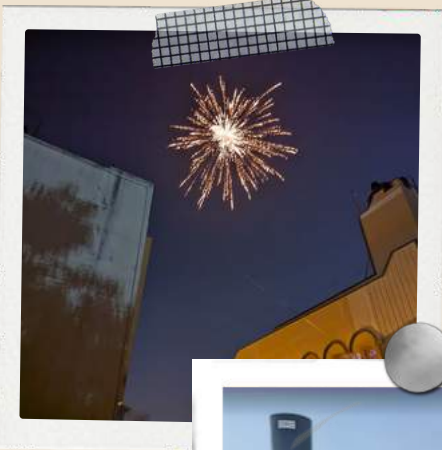
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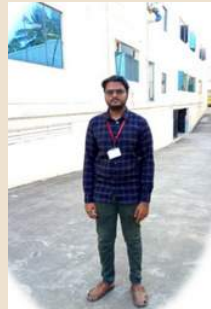


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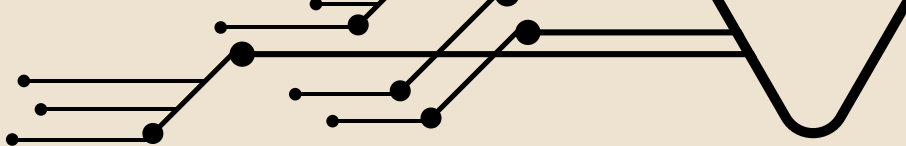


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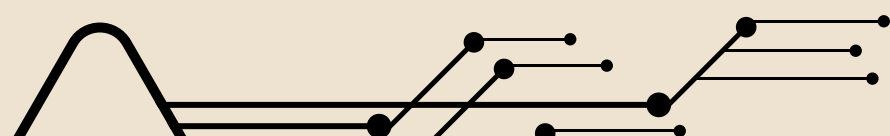
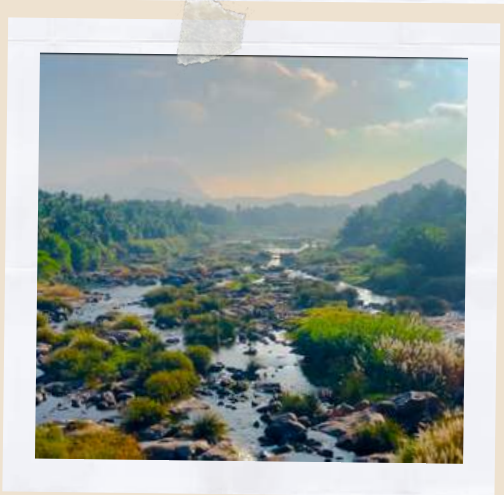
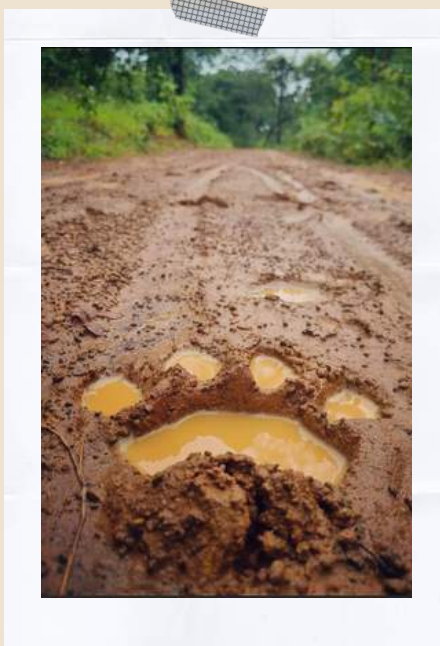
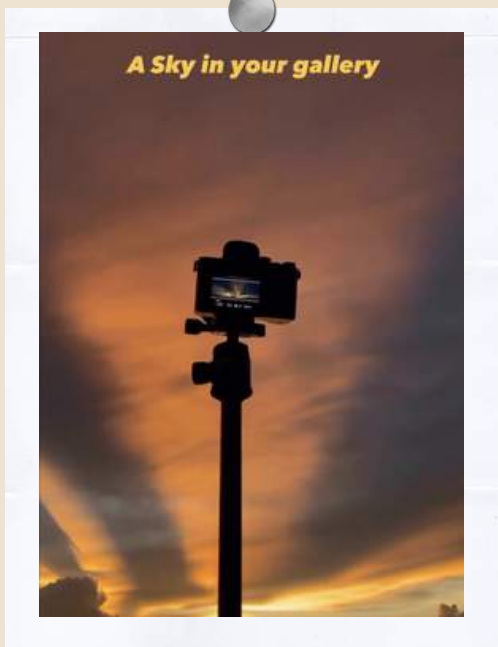


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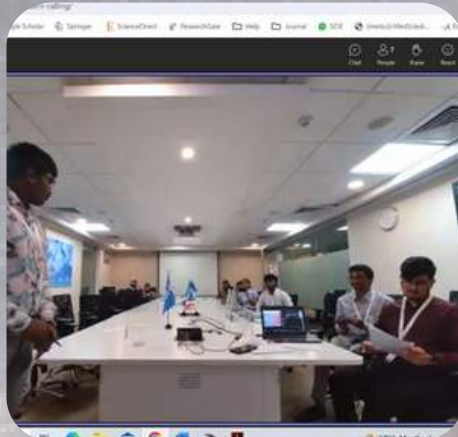
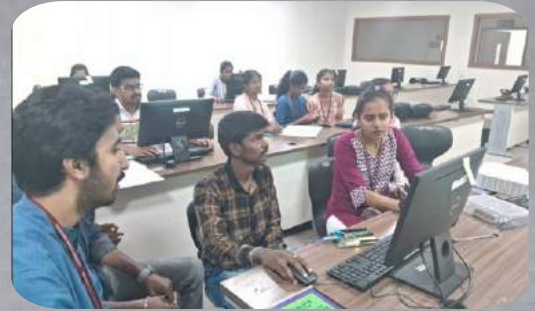


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SNAP CAPTURE

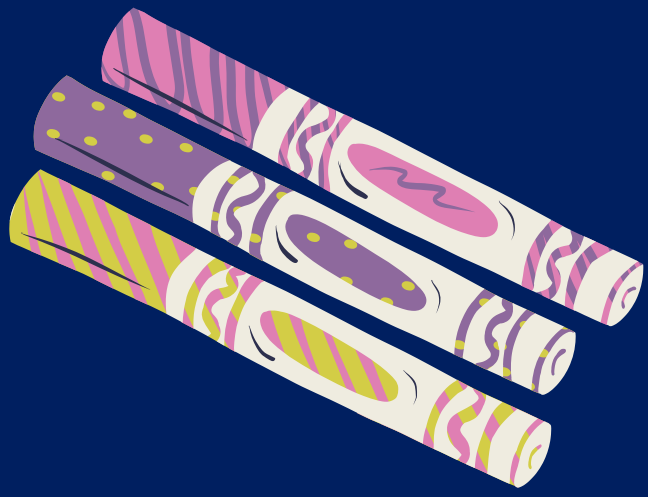






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