ST JOSEPH ENGINEERING COLLEGE

AN AUTONOMOUS INSTITUTION

Vamanjoor, Mangalore- 575028

PRODIGI EXPRESS

2024

Volume - XIII

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ACCREDITED BY NBA, NEW DELHI

PRODIGI
ECE STUDENTS ASSOCIATION

St Joseph Engineering College is an autonomous institute under Visvesvaraya Technological University, Belagavi, Karnataka, recognized by the All-India Council for Technical Education (AICTE), New Delhi. It operates under the trust "Diocese of Mangalore, Social Action Department." Established in 2002, SJEC offers top-tier education in Engineering, Business Administration, and Computer Applications at undergraduate, postgraduate, and research levels. With a dedicated faculty, state-of-the-art laboratories, and comprehensive facilities, the college currently serves around 2900+ students.

The UGC granted autonomous status to SJEC in 2021. The college has implemented the Outcome-Based Education (OBE) system since 2011. Four undergraduate programs—Computer Science & Engineering, Mechanical Engineering, Electronics and Communication Engineering, and Electrical & Electronics Engineering—are fully accredited by the NBA until June 2025. Additionally, the institution received an A+ grade from NAAC, valid until February 2026.

SJEC offers a variety of co-curricular and extracurricular activities to help students develop leadership and decision-making skills. The Campus Placement Department assists students in securing employment opportunities.

The Department of Electronics and Communication Engineering, established with the college's inception in 2002, the department has grown significantly through the efforts of its qualified faculty and advanced infrastructure. Currently, it admits 120 undergraduate students annually. Since 2015, the department has offered Ph.D. and M.Sc. (Engg) programs, approved by VTU. Faculty members are engaged in research and teaching, specializing in Communication, Signal Processing, Embedded Systems, and VLSI. Students are encouraged to participate in symposiums, conferences, and various technical and non-technical events.

Our vision is strengthened by industry collaborations with renowned organizations such as Karmic Design Pvt Ltd, Manipal, CMTI Bengaluru, Fr Mullers Medical College, Equidor MedTech Pvt Ltd, ICAR, CHD group, NUTEC and Kasturba Medical College, Mangaluru. Through the Department Association Prodigi and the Student Club Samarthya, we nurture a culture of innovation. Our vibrant IEEE Student Club connects students with industry leaders and academic experts, enhancing their learning experience.

Faculty members are actively engaged in research, securing grants from prestigious organizations to support their innovative projects. Our students consistently excel in national events like NASTECH by NASSCOM, the National Design & Innovation Clinic by CMTI Bengaluru, Manthan B Plan of the FKCCI and Anveshana Engineering Championship. Numerous student projects have received grants from the Karnataka State Council for Science & Technology, reflecting the quality of our academic endeavours.

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

PRODIGI
ECE STUDENTS ASSOCIATION

VISION

"To Excel in Electronics and Communication Engineering Education and Research, focusing on the needs of Industry and Society, with professional ethics"

MISSION

- Provide opportunities to deserving students for quality professional education in the field of Electronics and Communication.
- Design and deliver curricula to meet the changing needs of industry through student centric learning methodologies to excel in their profession.
- Recruit, Nurture and Retain best faculty and technical manpower.
- Consolidate the state-of-art infrastructure and equipment for teaching and research activities.
- Promote all-round personality development of the students through interaction with alumni, academia and industry.
- Strengthen the Educational Social Responsibilities of the Institution.

PROGRAMME EDUCATIONAL OBJECTIVES

- Develop a strong foundation in science and engineering, gain proficiency in modern tools and technologies, and apply analytical and design skills to create innovative solutions for real-world problems.

- Demonstrate professionalism, ethics, and effective communication while demonstrating leadership, excelling in teamwork and multidisciplinary collaboration.

- Cultivate strong interpersonal skills, adaptability to evolving technologies, and a commitment to lifelong learning.

KNOWLEDGE AND ATTITUDE PROFILE (WK)

WK1: A systematic, theory-based understanding of the natural sciences applicable to the discipline and awareness of relevant social sciences

WK2: Conceptually-based mathematics, numerical analysis, data analysis, statistics and formal aspects of computer and information science to support detailed analysis and modelling applicable to the discipline.

WK3: A systematic, theory-based formulation of engineering fundamentals required in the engineering discipline.

WK4: Engineering specialist knowledge that provides theoretical frameworks and bodies of knowledge for the accepted practice areas in the engineering discipline; much is at the forefront of the discipline.

WK5: Knowledge, including efficient resource use, environmental impacts, whole-life cost, re-use of resources, net zero carbon, and similar concepts, that supports engineering design and operations in a practice area.

WK6: Knowledge of engineering practice (technology) in the practice areas in the engineering discipline

WK7: Knowledge of the role of engineering in society and identified issues in engineering practice in the discipline, such as the professional responsibility of an engineer to public safety and sustainable development

WK8: Engagement with selected knowledge in the current research literature of the discipline, awareness of the power of critical thinking and creative approaches to evaluate emerging issues

WK9: Ethics, inclusive behavior and conduct. Knowledge of professional ethics, responsibilities, and norms of engineering practice. Awareness of the need for diversity by reason of ethnicity, gender, age, physical ability etc. with mutual understanding and respect, and of inclusive attitudes

PROGRAMME OUTCOMES

PRODIGI
ECE STUDENTS ASSOCIATION

PO1:Engineering Knowledge: Apply knowledge of mathematics, natural science, computing, engineering fundamentals and an engineering specialization as specified in WK1 to WK4 respectively to develop to the solution of complex engineering problems.

PO2:Problem Analysis: Identify, formulate, review research literature and analyze complex engineering problems

reaching substantiated conclusions with consideration for sustainable development. (WK1 to WK4)

PO3:Design/Development of Solutions: Design creative solutions for complex engineering problems and design/ develop systems/components/processes to meet identified needs with consideration for the public health and safety, whole-life cost, net zero carbon, culture, society and environment as required. (WK5)

PO4:Conduct Investigations of Complex Problems: Conduct investigations of complex engineering problems using research-based knowledge including design of experiments, modelling, analysis & interpretation of data to provide valid conclusions

PO5:Engineering Tool Usage: Create, select and apply appropriate techniques, resources and modern engineering & IT tools, including prediction and modelling recognizing their limitations to solve complex engineering problems (WK2and WK6)

PO6:The Engineer and the World: Analyze and evaluate societal and environmental aspects while solving complex engineering problems for its impact on sustainability with reference to economy, health, safety, legal framework, culture and environment (WK1, WK5, and WK7)

PO7:Ethics: Apply ethical principles and commit to professional ethics, human values, diversity and inclusion; adhere to national & international laws (WK9)

PO8:Individual and Collaborative Team Work: Function effectively as an individual, and as a member or leader in diverse/multi-disciplinary teams

PO9:Communication: Communicate effectively and inclusively within the engineering community and society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations considering cultural, language, and learning differences

PO10:Project Management and Finance: Apply knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a

team, and to manage projects and in multidisciplinary environments

PO11:Life-Long Learning: Recognize the need for, and have the preparation and ability for i) independent and life-long learning ii) adaptability to new and emerging technologies and iii) critical thinking in the broadest context of technological change (WK8)

PROGRAMME SPECIFIC OUTCOMES

1. Analyze and develop solutions in the areas of Signal Processing & Communication Systems.
2. Apply knowledge of embedded systems and VLSI to design and develop solutions for society.

BEST PRACTICES

- Incorporating collaborative, project-based, and peer learning methods, supported by effective use of Learning Management Systems (LMS) in all courses.
- Offering bridge courses and remedial classes to better understand complex subjects.
- Conducting open-ended experiments in all laboratories to foster innovation and practical skills.
- Organizing industrial visits, facilitating internships, and promoting online courses for skill enhancement.
- Strengthening student interactions with alumni and industry professionals for career guidance and opportunities.
- Encouraging students to undertake product development and research- oriented projects.
- Implementing a personalized mentoring process, where each faculty member supports and guides their mentees individually.
- Encouraging and preparing students for placements in core companies.

PRODIGI

PRODIGI is the student association of the Electronics & Communication Engineering Department, named to reflect the exceptional qualities and abilities of its members. Led by student office bearers and guided by the Head of Department and faculty coordinators, PRODIGI serves as an intellectual hub for nurturing creativity and talent.

Throughout the year, PRODIGI organizes a variety of activities, including:

- Technical Talks: Featuring renowned speakers from academia and industry.
- Peer Learning Sessions: Encouraging knowledge sharing among students.
- Workshops: Hands-on experiences to enhance technical skills.
- Extracurricular Activities: Fostering teamwork and leadership development.

PRODIGI is dedicated to cultivating the potential of each member, providing a platform for growth and innovation.

EDITORIAL BOARD

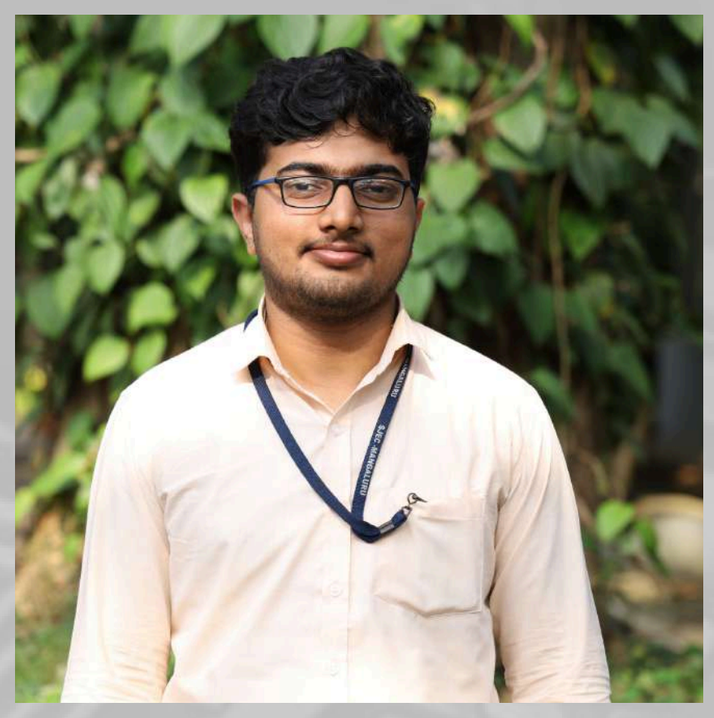
VIJETH K GOWDA

SARVIKA S

VAISHAK

SHREYAS S

SINCHANA S RAI



SUJAN S SALIYAN

RANJITHA SHETTY

P VISHWAS KARANTH

PRODIGI OFFICE BEARERS

RATHAN
PRESIDENT

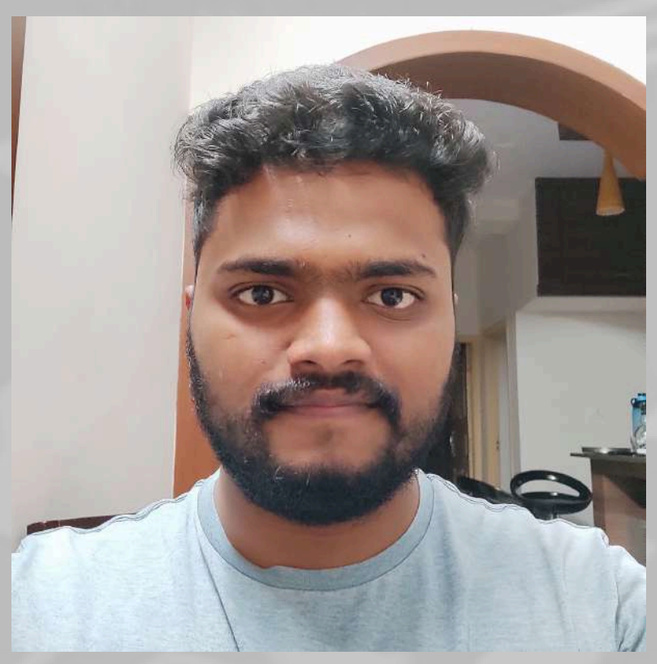
VIJETH K GOWDA
VICE PRESIDENT

DEEVITH HEGDE
VICE PRESIDENT

SHARAN KULLLUMUTLU
SECRETARY

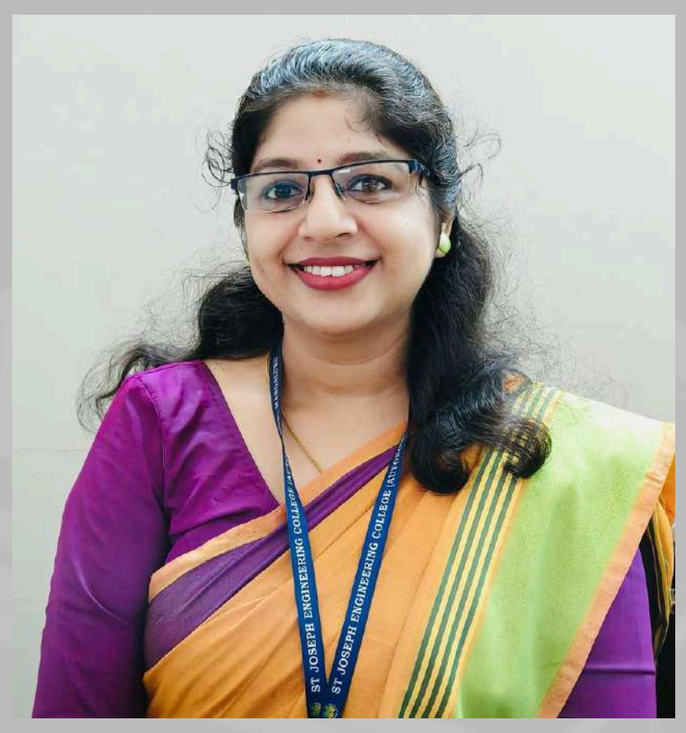
SARVIKA S
JOINT SECRETARY

VAISHAK
JOINT SECRETARY



AJAY GEORGE
TREASURER

FACULTY COORDINATORS



MS K AARYA SHRI
ASSISTANT PROFESSOR

MS PRIYA SEEMA MIRANDA
ASSISTANT PROFESSOR

CONTENTS

DR DAYAKSHINI
HOD- ECE

MESSAGE FROM HOD

"Great things are not done by impulse, but by a series of small things brought together" says Vincent Van Gogh, well known Dutch painter.

It gives me immense joy to look back at the accomplishments of the Electronics and Communication Engineering Department through our active student association, PRODIGI. This year has been filled with enriching experiences from technical talks and workshops to placement activities and innovation-driven events. These initiatives have not only helped students build their skills but also encouraged collaboration and creative thinking within the department.

I would like to extend my heartfelt appreciation to the entire PRODIGI team. Special thanks to the student office bearers led by Mr. Rathan and Mr. Vijeth K Gowda, whose leadership and enthusiasm have been truly commendable. I also gratefully acknowledge the unwavering support and guidance of our faculty coordinators, Ms. K Aarya Shri and Ms. Priya Seema Miranda, for their consistent efforts in mentoring and organizing the events throughout the year.

As we present this edition of Prodigi Express 2024, I congratulate all those who contributed and participated. Your passion and teamwork reflect the spirit of our department. Wishing each of you continued growth, success, and many more achievements in the journey ahead.

Warm regards

Dr. Dayakshini
Professor and HoD
Department of ECE
St Joseph Engineering College, Mangaluru

EDITORIAL TEAM

EDITORIAL NOTE

Dear Readers,

It gives us immense pleasure to present the XIII edition of our departmental magazine, Prodigi Express. This edition serves as a vibrant reflection of the ECE Department's dynamic spirit—capturing achievements that span academics, cultural endeavors, technical milestones, and community engagement.

Through these pages, we celebrate the dedication, creativity, and collaboration that define our department. We hope this edition inspires you to contribute your own talents and ideas toward further enriching our collective journey.

We extend our heartfelt gratitude to the management for their continued support, the editorial team for their tireless efforts, and the Head of the Department, faculty, and non-teaching staff for their constant encouragement and guidance.

Wishing you an enjoyable and insightful read!

Warm regards,

Vijeth Gowda
Sarvika S
Vaishak
Shreyas S
Sinchana S Rai
Sujan S Salian
Ranjitha Shetty
P Vishwas Karanth

Ms K Aarya Shri
Ms Priya Seema Miranda

Editorial Team – Prodigi Express 2024

TEACHING LEARNING PRACTICES

Lectures

Online Sessions

Bridge Course

Tutorials

Remedial Sessions

Flipped Classroom

Open-Ended Experiments

Active Learning Strategies

Assignments

Quizzes

Laboratory Sessions

Ability Enhancement Sessions

Mini Project

Project

Internship

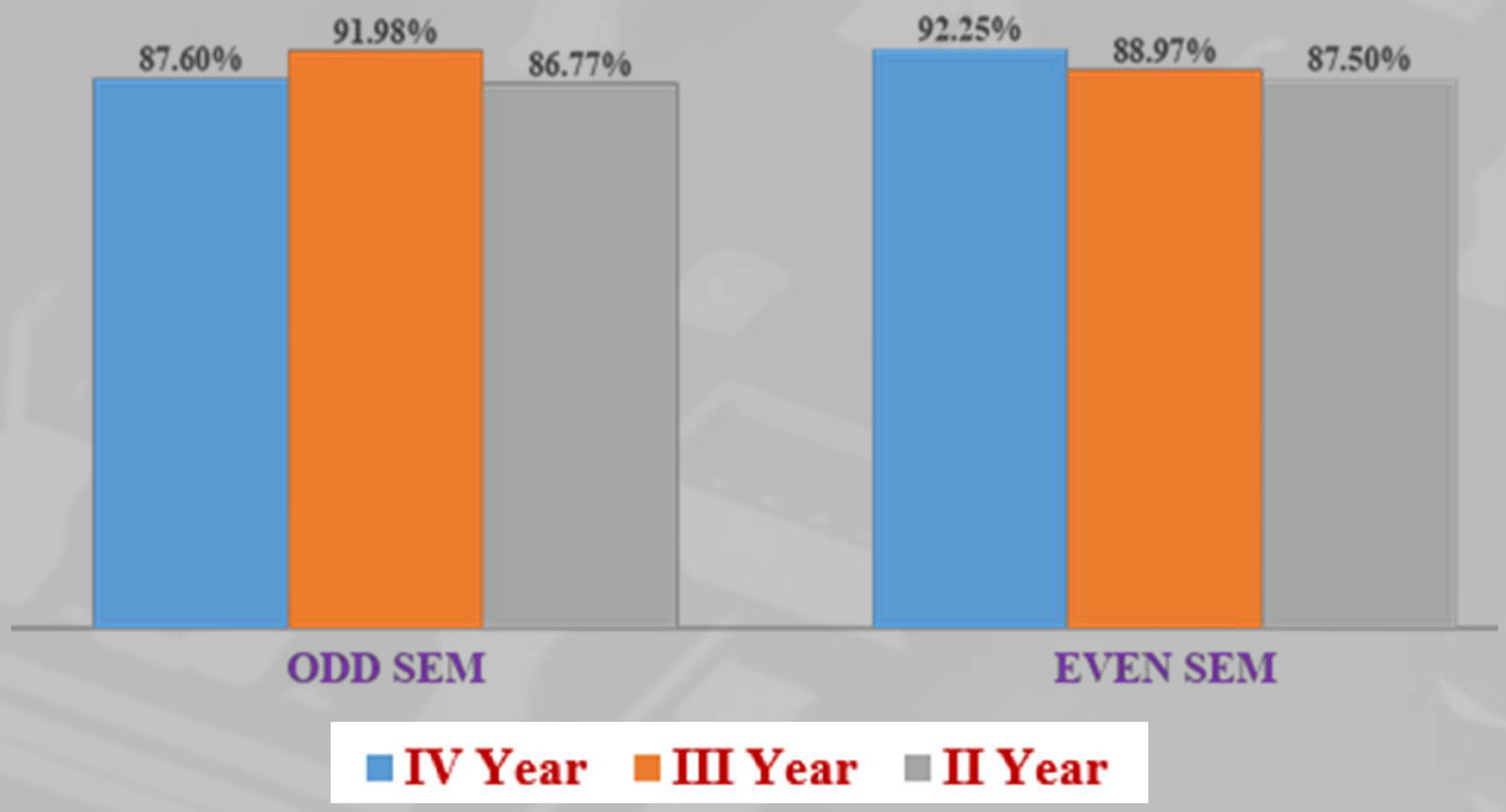
Industrial Visits

Workshops and Invited Talks

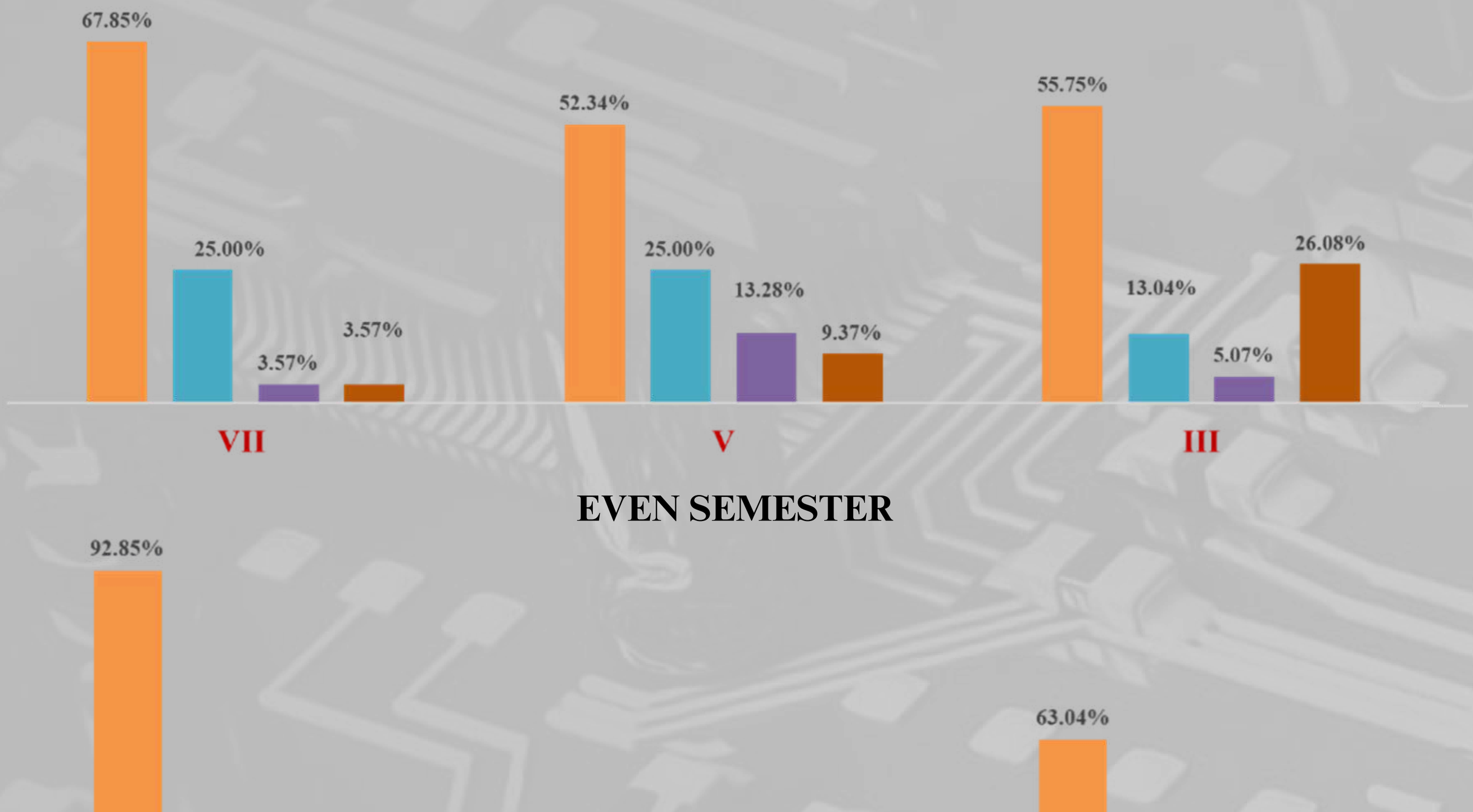
Seminars

ACADEMIC ACHIEVEMENTS

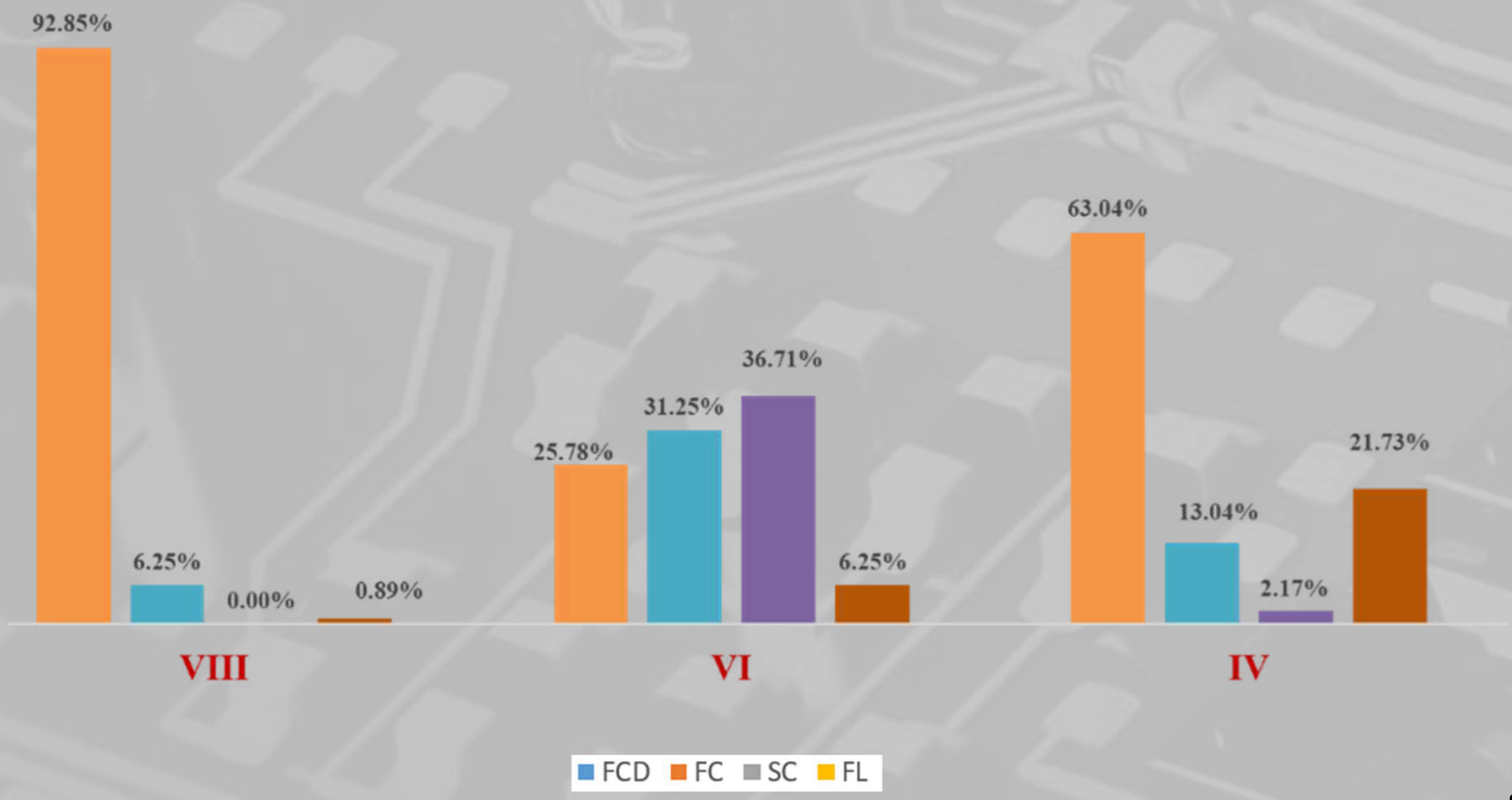
ACADEMIC YEAR 2023-24



ODD SEMESTER



EVEN SEMESTER



TOPPERS

IV YEAR

PRASHANTH PARASHURAMA KOTI

SWATHI RAI M

VISHRUTHA K

VIKHYATH D K

ASHLYN ELVIRA DSILVA

III YEAR

HAVALA P N

KHUSHI SHETTY

SIMONE ANNE D SOUZA

PRAMITHA VALERIE D SOUZA

BRINDA

II YEAR

ADITHYA G SHENOY

PRISHA KAMALAKSHA AIL

JOSHUA QUINTHINO ALBUQUERQUE

RAKESH BASAVARAJ HIKADI

MEGHA VISHNU SHANBHAG

DEPARTMENTAL ACTIVITIES

PRAYATHNA 2023

The "PRAYATHNA 2023" five-day placement training program, organized by the Department of ECE, was held from 20 to 25 September 2023, at Spoorthi Hall. This program was designed to equip final-year ECE students to refresh the concepts in fundamental subjects and the skills needed for success in core company placements.

Workshop on Patents and Prior Art Search Empowers SJEC Faculty

The Department of Electronics and Communications Engineering at SJEC held a workshop titled “Patents: Prior Art Search” for faculty on October 9, 2023, at the Digital Signal Processing Lab. The event, led by Dr. Purushothama Chippar, Vice Principal and Dean of Research and Development, witnessed participation from 28 educators and researchers.

DEPARTMENTAL ACTIVITIES

Workshop on Conducting Effective Novelty Search

The Department of Electronics and Communications Engineering hosted a workshop "Conducting Effective Novelty Search" on the 12th of October, 2023 at the Spoorthi Seminar Hall. for over 60 final year ECE students. The workshop was guided by Dr. Venkatesh Babu K. P, Assistant Professor in the Department of Mathematics. Dr. Venkatesh Babu K. P, well-versed in the domain, assumed the pivotal role of a resource person for this engaging and informative session.

Workshop on Unlocking the Power of ARM Cortex-M

The Department of Electronics & Communication Engineering hosted a workshop titled "Unlocking the Power of ARM Cortex-M " on October 28, 2023. This workshop aimed to provide both faculty and students of the ECE Department with practical experience in utilizing newly acquired ARM Cortex-M kits and interfacing various peripherals with the main board.

DEPARTMENTAL ACTIVITIES

Workshop on Internet of Things"

St. Joseph Engineering College, Vamanjoor, Mangaluru, in collaboration with SJEC AICTE IDEA LAB and the Departments of Electrical & Electronics Engineering and Electronics & Communication Engineering, organized three-day workshop on "Internet of Things" from 21 to 23 November, 2023, specifically tailored for the teaching faculties.15 faculty members from different Institutions registered for the workshop and actively participated.

Bridge course: ElectroLink - Path to Proficiency

The Department of Electronics and Communication Engineering (ECE) conducted a 3-day bridge course titled "ElectroLink - Path to Proficiency" from November 27 to 29, 2023. The course aimed to enhance the understanding and skills of second-year ECE students.

DEPARTMENTAL ACTIVITIES

PRODIGI 2023-24 Inaugration

The Department of Electronics and Communication Engineering at SJEC inaugurated Prodigi Activities 2023-24 and the Samarthya Club on December 7, 2023, at Kalam Auditorium. **Dr. Shashidhar G** Koolagudi, Professor and Former Head of Computer Science at NITK Surathkal, was the Chief Guest, and Dr. Sudheer M, Dean Academics, graced the event as Guest of Honor. The program included a briefing on past activities, the felicitation of meritorious students, and the introduction of new office bearers. Dr. Koolagudi also delivered an engaging technical talk on Introduction to Artificial Intelligence, covering the basics and applications of AI/ML. The event was coordinated by Assistant Professors Ms. K Aarya Shri, Ms. Priya Miranda, Mr. Glenson Toney, and Mr. Aldrin Claytus Vaz.

Workshop on VLSI Design: Current & Future Perspectives

YOUR PARAGRAPH TEXT

The Department of ECE organized a technical seminar on "VLSI Design: Current & Future Perspectives" for second- and third-year students on February 20, 2024, at Prerana Hall, with around 250 participants. Ms. Sampada Pachaury, Director of IUCEE Foundation, led the session, discussing memory design, address decoding, chip design, and future trends in VLSI. She emphasized the importance of strong fundamentals and practical skills. The seminar, coordinated by Asst. Prof. Ms. Deepthi S R, was highly insightful for aspiring VLSI professionals.

DEPARTMENTAL ACTIVITIES

Talk on "VLSI Fundamentals: Building blocks of Modern Electronics"

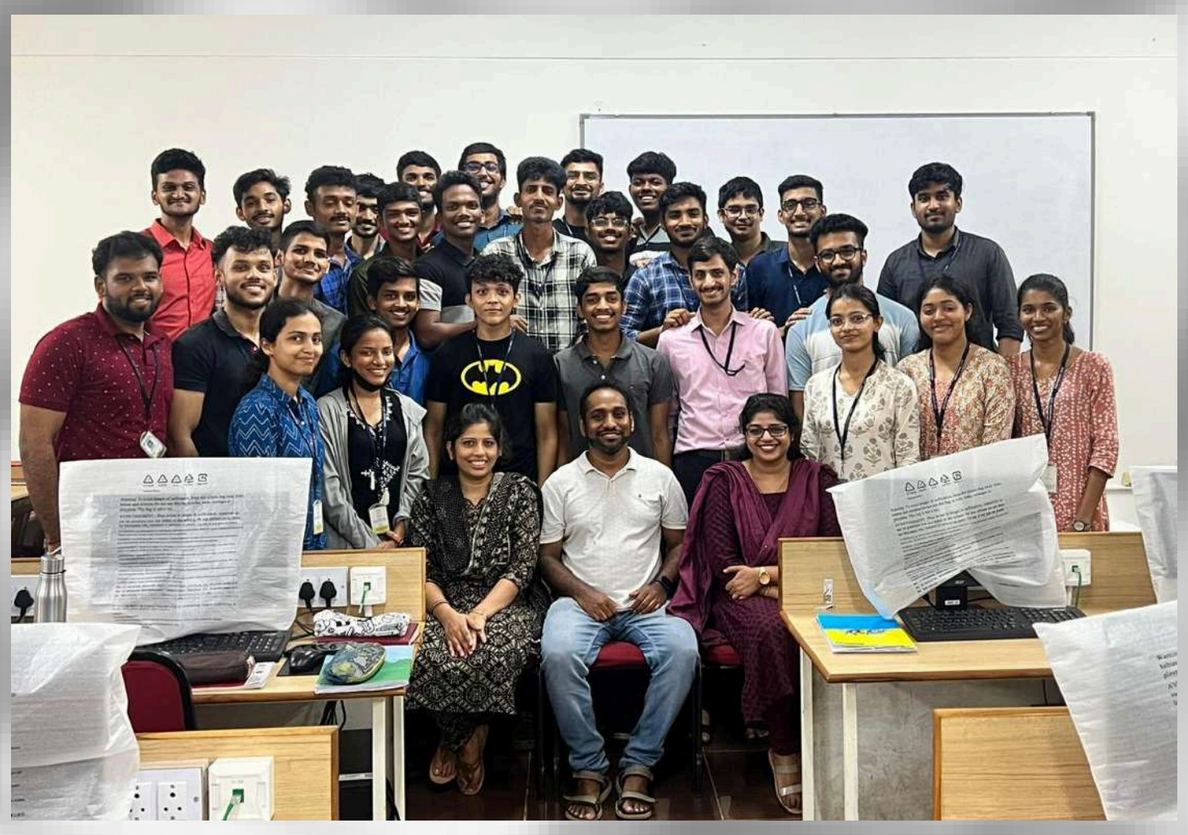
The Department of Electronics and Communication Engineering, in association with the IE(I) SJEC student chapter, organized a talk on "VLSI Fundamentals: Building Blocks of Modern Electronics" on May 17, 2024, for I Year ECE students at Fr Fred Memorial Hall. Dr. Arjun Sunil Rao, an alumnus of 2014 and Assistant Professor at MIT, Manipal, was the resource person. The session, coordinated by Dr. Jennifer C Saldanha, covered key topics like Moore's Law, semiconductors, MOSFETs, and their applications, along with career opportunities in the semiconductor industry.

Open House 2024

The Department of Electronics and Communication Engineering, in association with the Placement and Training Group, organized "Open House 2024" for 6th semester ECE students on May 17, 2024, at Fr Fred Hall. The session featured 8th semester students as panelists, who shared their placement preparation experiences, emphasizing the importance of projects, internships, certifications, and programming skills. Dr. Dayakshini (HOD-ECE) and Mr. Glenson Toney addressed the students, while the session was moderated by Ms. Nandini Maninarayana and Ms. Florence Nishmitha, and coordinated by the Training & Placement team. The event concluded with an engaging Q&A session.

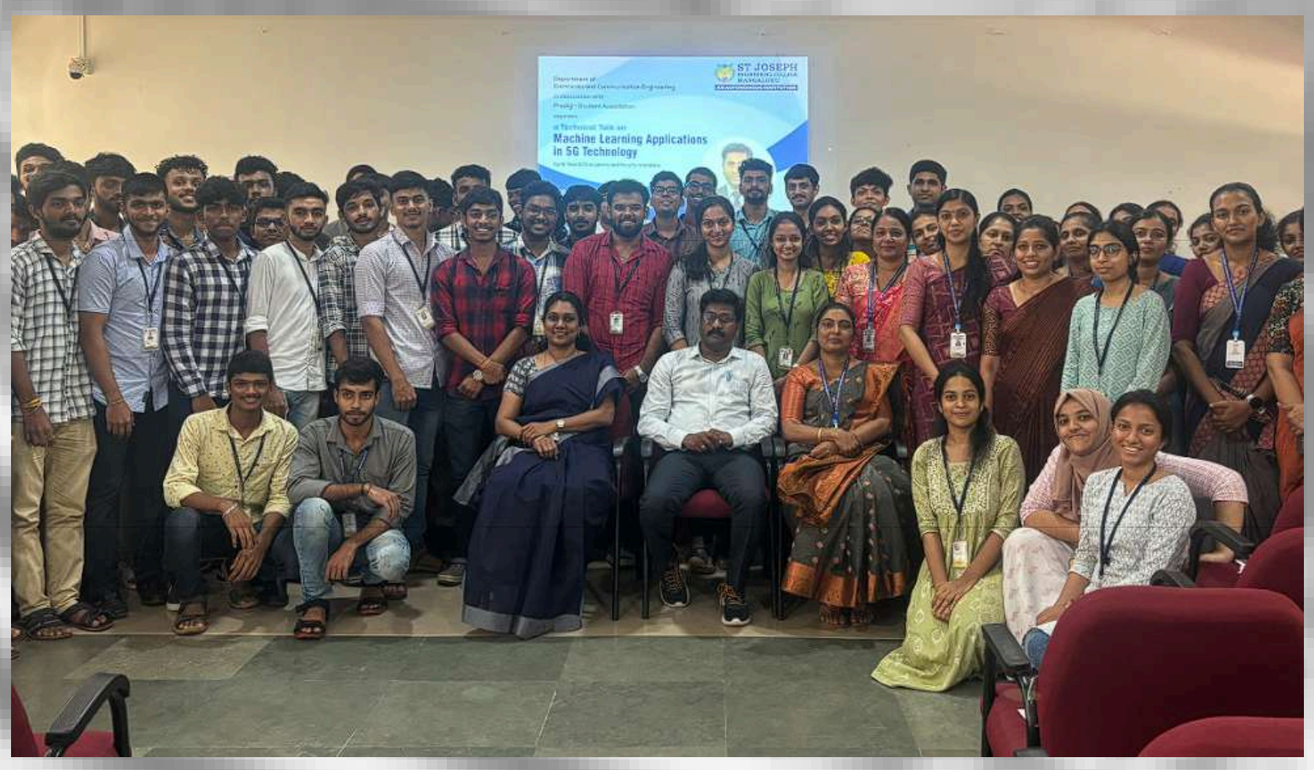
DEPARTMENTAL ACTIVITIES

Workshop on Design and Verification of Digital Systems using Verilog HDL



Two-Days Workshop was organized for for III Year ECE Students on “Design and Verification of Digital Systems” using Verilog HDL on 24-25 May 2024 .The primary objective of the workshop was to equip III Year ECE students with the necessary skills to analyze, design, and verify basic building blocks of digital systems using Verilog HDL

Technical talk on "Machine Learning Applications in 5G Technology"



A technical talk on "Machine Learning Applications in 5G Technology" was organized for III Year ECE students on May 31, 2024, at Fr Fred Memorial Hall. Dr. Christopher Clement J, Associate Professor at the School of Electronics Engineering, VIT Vellore, served as the resource person. He shared practical insights on applying machine learning to optimize 5G networks using MATLAB, highlighting real-world scenarios that enhance network efficiency, reduce latency, and improve communication reliability. The session was coordinated by Dr. Dayakshini (HOD, ECE), Ms. K Aarya Shri and Ms. Priya Miranda.

DEPARTMENTAL ACTIVITIES

Three-day FDP on "Advancing Research with MATLAB & Simulink"

A three-day Faculty Development Program (FDP) titled "Advancing Research with MATLAB & Simulink" was conducted from June 10 to 12, 2024, in association with MathWorks and CoreEL Technologies for the faculty members of SJEC. Held in the Digital Signal Processing Lab, the FDP saw participation from 32 staff members and was led by Mr. Rakshith B S, Associate Manager–Senior Application Engineer at CoreEL Technologies. The sessions covered key areas such as signal processing, image processing, communication system design, and antenna modeling using MATLAB and Simulink. Participants engaged in hands-on activities, practical demonstrations, and group projects, enhancing their technical skills and research capabilities. The event was well-coordinated by Ms. Chaitra U R and Ms. Deepthi S R, Assistant Professors in the department.

INNOVATE 2024 -Turn Your Ideas to Reality

As part of the UDAAN initiative, the Department of Electronics & Communication Engineering, in collaboration with the Placement & Training Group, organized a comprehensive placement training program for 6th semester ECE students at SJEC. The series began with a session on "Crafting Effective Resumes" on June 12, 2024, followed by personalized Resume Feedback Sessions from June 18 to 20, and a "Level Up Your Resume" workshop on June 21. The initiative culminated in a full-day Mock Interview session on June 29, featuring technical and HR professionals from leading companies like KarMic Design, Brevera Technologies, Global E-Softsys, Novigo Solutions, EGDK India, and Exito Media. Coordinated by the department faculty and Training & Placement Cell, this initiative aimed to enhance students' readiness for recruitment through practical guidance and industry interaction.

DEPARTMENTAL ACTIVITIES

Placement Training Activities for 6th Semester ECE Students

The Department of Electronics and Communication Engineering, in association with IEEE SJEC Student Branch and IEEE Mangalore Subsection, organized a two-day workshop "Innovate-2024: Turn Your Ideas to Reality" on 13–14 June 2024 for pre-final year ECE students, with 133 participants. The workshop aimed to guide students through ideation, project planning, documentation, and ethical research practices. Sessions were conducted by industry experts and faculty on topics including idea generation, literature review, technical writing, project management, block diagram creation, and ethical considerations. The event also featured interactive talks on pitching project ideas and converting projects into products, equipping students with skills vital for industry and academic success.

On December 7, 2023, the department extended a warm welcome to the new batch of students with spirited greetings. The event was brought to life with lively activities, engaging games, and captivating cultural performances. Faculty members actively participated, adding to the festive mood. The occasion was thoughtfully organized and hosted by third- and fourth-year students, ensuring everything ran smoothly. The day stood out as a joyful and memorable celebration of friendship and new beginnings, marking the start of an exciting academic journey for the newcomers.

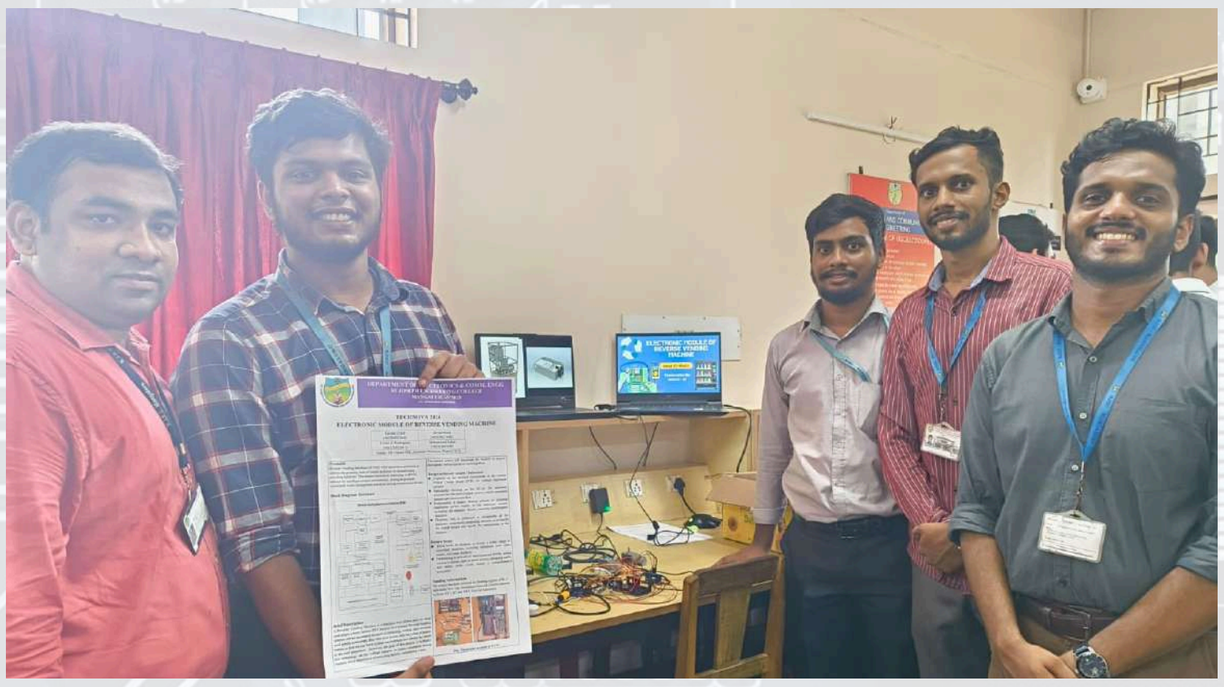
DEPARTMENTAL ACTIVITIES

AU REVOIR, the farewell ceremony for Batch 2024, was held on May 3, 2024. The event was featured with nostalgic reflections, vibrant performances, and warm wishes for a bright future.

STUDENT ACHIEVEMENTS

Aditya Rao, Gagan Surya Kumaar S, Aman Balakrishna Muttum, Sathwik A Bangera guided by Mr Glenson Toney, Assistant Professor, ECE received a Grant of Rs 1.67 Lakhs from CMTI for the project titled “An Autonomous Agricultural Machinery for Enhancing Plant Disease Detection and Real Time Analysis”

Christopher Inas Laindav, P Vishwas Karanth and Shashank B of II Year ECE secured Second place in Robowars at Tech-Fest, IIT Bombay on December 2023.



Mr Leslie Kiran Rodrigues, Mr Kavish H Uchil, Mr Lloyd Monis and Mr Mohammad Sahal M Sadik won the Innovative Project Prize for the project titled “Electronic Module of Reverse Vending Machine” during TECHNOVA 2024 held on 2 May 2024.

Aaron Lawrence Lasrado, Loyed Steeven Dias, Dafny Treeza Dlima and Lanish Abhishek Pinto secured best project award for the project titled “pulmo track-a breath based lung capacity estimation tool” guided by Dr Jennifer C Saldanha, at mini project exhibition 2024 held at Dept of Electronics & Communication at SJEC Mangaluru on Auguts 1, 2024.

Sonal Tennison Monis, Reshma, Roshni and Sinchana of ECE final year won second prize for the project titled "Hear Ally App for Enhancing Hearing Health Through Mobile Solutions for Ménière Disease", guided by Dr Jennifer C Saldanha, at I2CONNECT project exhibition 2024 at VCET on 31 May 2024.

STUDENT ACHIEVEMENTS

Ms Lisha D S received a certificate of achievement for outstanding performance in the sustainable sector program at Anurag University National Forum 2.0, which was organized by the Anurag University IUCEE Student Chapter and held from June 18-20, 2024.

Ms Lisha D S passed the Certificate B exam in 2024 under the Ministry of Defence, Government of India.

Mr Nikshep Sathish Rai has passed Certificate 'B' NCC examination held in 2023 under the Ministry of Defence, Government of India.

Swathi Rai M has successfully cleared the GATE-24 examination.

Surakshith K, has presented a paper titled "Shuttle Vision: Real-Time Badminton stroke recognition system" in the 15th International conference on recent engineering & technology" held on 30th & 31st May2024 at Sri Venkateshwara College of Engineering, Bangalore.

Channaveergouda Huttanagoudra & Cedric Pius Fernandes had participated in National youth day 2024, District level Program organised by Yuvanika foundation on 12.01.2024 at District Amdedkar Bhavan, Mangalore.

CAMPUS TO CORPORATE

SJEC

1 hourglass	1 7EDGE	1 A1	15	1 accenture	7 ARL Access Research Labs	2
3 ALLSEC	1 ApMoSys	17 CAPE ELECTRIC	2 AVON	5 CapitalVia Investment Advisor	1 comviva	
1 DEV IT Simplified	1 exalca	2 Global ESoftSys	4 GLOWTOUCH	3 IntelliPaat	2 PENTAGON SPACE	
3	3 KGiSL MicroCollege	12 KodNest	10 mirafra TECHNOLOGIES	1	1 POLYCAB IDEAS. CONNECTED.	
4 PRAGATI Partnering Machine Tool Builders Worldwide	5 Rexnord	3 RINEX	10 SAKTHI AUTO	5 SIEMENS	1 SION Semiconductors	9 SKILLWINNER
6 skolar	2	2 stellium	1 SURYA SOFTWARE	1 S		
4 TESSOLVE	2 UKSHATI	1 Visteon	3 X-Workz ODC	10 Ralle Technologies	10 CORIZO	

FACULTY ACHIEVEMENTS

PRODIGI
ECE STUDENTS ASSOCIATION

Jennifer Charlotte Saldanha, Assistant Professor, ECE Department was awarded the PhD for her thesis titled "Analysis of Speech for Voice Pathology Detection and Severity Measurement" by Visvesvaraya Technological University, Belagavi in March 2024.

Dr Aldrin Claytus Vaz, Assistant Professor, ECE Department was awarded the PhD for his thesis titled "Performance Improvement of Visible Light Communication System using Advanced Coding Techniques" by Manipal Academy of Higher Education, Manipal in March 2024**.**

Mr Glenson Toney, Assistant Professor, ECE Dept. received the Best Paper Award for the paper titled "A Novel Lane Detection Approach for Vehicle Adaptive headlamps" at the International Conference on Advances in Smart Sensor, Signal Processing & Communication Technology- (ICASSCT 2024) held at Goa University, Goa on March 2024.

Ms Nandini Maninarayana, Assistant Professor, ECE Department has successfully completed Digital Skills Readiness Program and has been awarded as"Wipro Certified Faculty". She is also recognized as a mentor for Project Based Learning in Java Full Stack. Successfully Completed TalentNext Project" on "Cloud Computing with Big Data" during December 2023 - March 2024

KSCST Funding

- Dr Roshan R Naik received KSCST funding of ₹5,000 in the year 2023–24 for the project titled "**Projection Matrix Estimation in 3D–2D ICP Registration.**"
- Dr Jennifer Saldanha received KSCST funding of ₹5,000 in the year 2023–24 for the project titled "**Hear Ally App for Enhancing Hearing Health through Mobile Solutions for Meniere's Disease.**"
- Ms Nandini Maninarayana received KSCST funding of ₹5,000 in the year 2023–24 for the project titled "**High-Speed Internet Connectivity Using Li-Fi.**"
- Ms Aswathi T received KSCST funding of ₹5,500 in the year 2023–24 for the project titled "**Hand Tremor Suppression Gloves for Parkinson's Patients**."
- Mr Radhakrishna received KSCST funding of ₹5,500 in the year 2023–24 for the project titled "**Non-Invasive Blood Glucometer.**"
- Dr Aldrin Claytus Vaz and Mr Glenson Toney received SJEC Seed Money funding of ₹93,000 in the year 2023–24 for the project titled "**Optimization of Visible Light Communication Framework using 5G Forward Error Correction Coding techniques for Application towards Vehicle-to-Vehicle Communication.**"
- Ms Nandini Maninarayana and Mr Vijay Ganesh P C received SJEC Seed Money funding of ₹1,54,860 in the year 2023–24 for the project titled "**Wireless device for Dynamic Assessment of Motor Function of Lower Limbs in patients.**"

ಮನದಾಳ

-ಸಿಂಚನ ಎಸ್ ರೈ (Sinchana S Rai) 4thYear

ತಿಳಿಯದ ಆಯಸ್ಸಿನ ಗೋಪುರದ ಮುಂದೆ
ಮರೆಯಲಾಗದ ನೆನಪ ಜೋಳಿಗೆಯ ಹೊಂದಿ
ಕನ್ನಡಿಯ ಬಿಂಬವಿಲ್ಲಿ ಮರೆಯಾಗಿದೆ

ಭಾವನೆಗಳ ದರ್ಪಣದಲ್ಲಾಗಿರುಷೆ ನೀ ಬಂಧಿ

ಕಾಣದ ನೀರಿನ ಸೆಲೆಯ ಬದುಕು.
ಭಾವನೆಯ ಬಾಯಾರಿಕೆಗೆ ಬೆಂದಂತಿಹುದು.
ನಿಶ್ಚಲ ನಿಷ್ಕಪಟ ನಿರ್ಮಲವ ಹುಡುಕು.

ನಾಳಿನ ಪುಟಗಳೀಗ ಇಂದೇ ಬರೆದಂತಿಹುದು

ಕನಸು ಹುಮ್ಮಸ್ಸನ್ನು ಪಡೆವ ನಿನ್ನ ಹಠವೇ
ತುಳಿದರೂ ಅಳಿದರೂ ಮರುಗದಿರರು ಮನವೇ.
ಅಂತರಂಗದ ಶುದ್ದಿಗೆ ನೀ ತೊಡಕಾಗಿರುವೆ

ಅಮೃತವನ್ನೇ ಉಣಿಸಿದರೂ ವಿಷವನ್ನೇ ಪಡೆವೆ
ಮುಂದಿನ ನಿಲ್ದಾಣದಲ್ಲಿ ಕಂಡಿಹುದು ಭಾವನೆಯ ರತ್ನ.
ಕನವರಿಕೆಗಾಗಿ ಮರೆಯಬೇಡ ನೀ ಪ್ರಯತ್ನ

ಬೆಲೆ ಇರದ ರತ್ನದೆಡೆಗೆ ಹೋಗದಿರು ಮನವೇ

ಜೀವನದ ಸವಾಲುಗಳಲ್ಲಿ ಬಲಿಯಾಗದಿರು. ಒಲವೇ,

ಮನ- ಕರ್ತವ್ಯ- ಸಮಯದ ಬೇಗೆಯನ್ನು

ನೀ ತಣಿಸು, ಪೋಷಿಸು, ಸಮೃದ್ಧಿಯಾನ್ನಾಗಿಸು...

A Wild Flower

- Jyothika KJ 2nd Year

Walking through the streets
she felt the breeze
Scented with the aroma
of all her trauma
It was never refreshing
But the suffocation
was bewildering
“I see the old sensitive you,
my dear”, she murmured.
The dawn, the dusk,
All the pleasures of day
seemed to be a mere lie
And when the night came,
she broke into the stars.
Although,
the chaos she carried
Was the art of her glory
Now,
She who resists the wind,
She the wildest of flowers,
Caught between
the alluring day and
the ethereal night,
was all alone.
But little did she know
there is someone out there
who loves wild flowers…
It’s just the perfect time,
The time of the year
when the orchids bloom
to spread its soothing scent,
that she awaits.
In a world were
roses are praised,
She remained as
A wild flower with
the strangest fragrance
of all time.

“SOUL OF LIFE”

-A V Lavanya 2nd Year

A LUSH GREEN FOREST OF SERENITY,
A REFRESHING NEWNESS AND BREEZE
RISE WITH THE ETERNAL SUN.
EUPHONY OF PARROTS AND CUCKOOS
THAT EMERGE FROM EVERY CORNER,
ECHOING EVERYWHERE,
IN THE LAP OF BEAUTIFUL NATURE!

POETS HAVE WRITTEN, SINGERS HAVE SUNG,
PRAISING YOUR CHARM.
THE BRUSH BLOOMED YOUR BEAUTY,
NATURE, WE ARE BLESSED TO PLAY IN YOUR
LAP.
BUT WITH A SIGH, I THOUGHT,
THEY CAMPAIGN FOR YOUR PROTECTION,
BUT ALL IS IN VAIN!

THEY DESTROY YOU DAY AND NIGHT,
AGAIN AND AGAIN.
I SNAPPED OUT OF MY BLISSFUL IMAGINATION...
AND NOW I STAND IN THE MIDDLE OF A
CONCRETE JUNGLE,
WALKING ON DUSTY STREETS
FILLED WITH TOXINS AND HUSTLE-BUSTLE
EVERYWHERE,
CACOPHONY OF INDUSTRY
LINGERING IN THE DEPRESSING BREEZE.

MOORE'S LAW
THE EXPIRING PROMISE OF COMPUTING

-Aditi G Amin 2nd Year

The 1960s marked the dawn of the computing age. As time passed, computer chips became increasingly efficient. Gordon Moore, co-founder of Intel, observed the trend in the increase in the number of transistors in a chip.

He made an observation that "the number of transistors that can be fit onto a chip will double every year or two." His observation proved true, and this trend continued until today.

As the 21st century approached, Moore's Law started to fade away as transistors reached their limits. Today, transistor size is comparable to atomic size.

Consequently, electrons within transistors undergo Quantum Tunneling (an effect where electrons tunnel across energy barriers), rendering transistors unreliable. Decreasing size also increases heat's impact on intricate transistor circuitry.

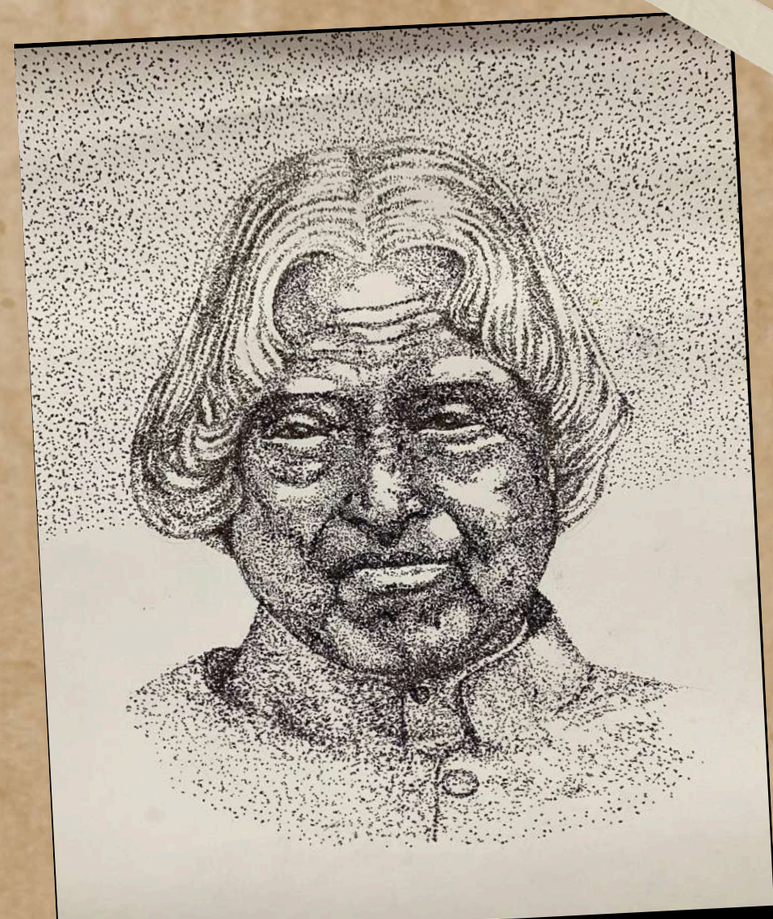
Moore's Law is not a physical law but an observation made by Moore in the 20th century.

As we near the end of this trend, we must explore new, efficient, and sustainable solutions to advance chip-making.

PAINT IT RED..

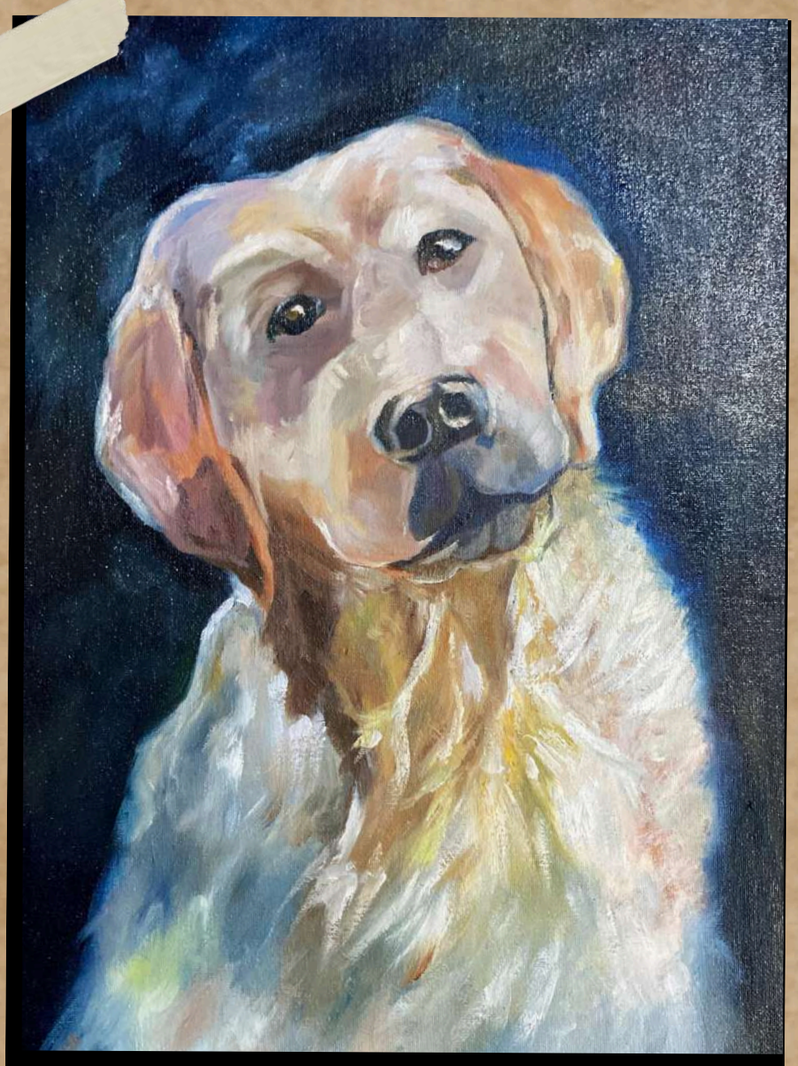
Mahee - 4th year

Mahee - 4th year

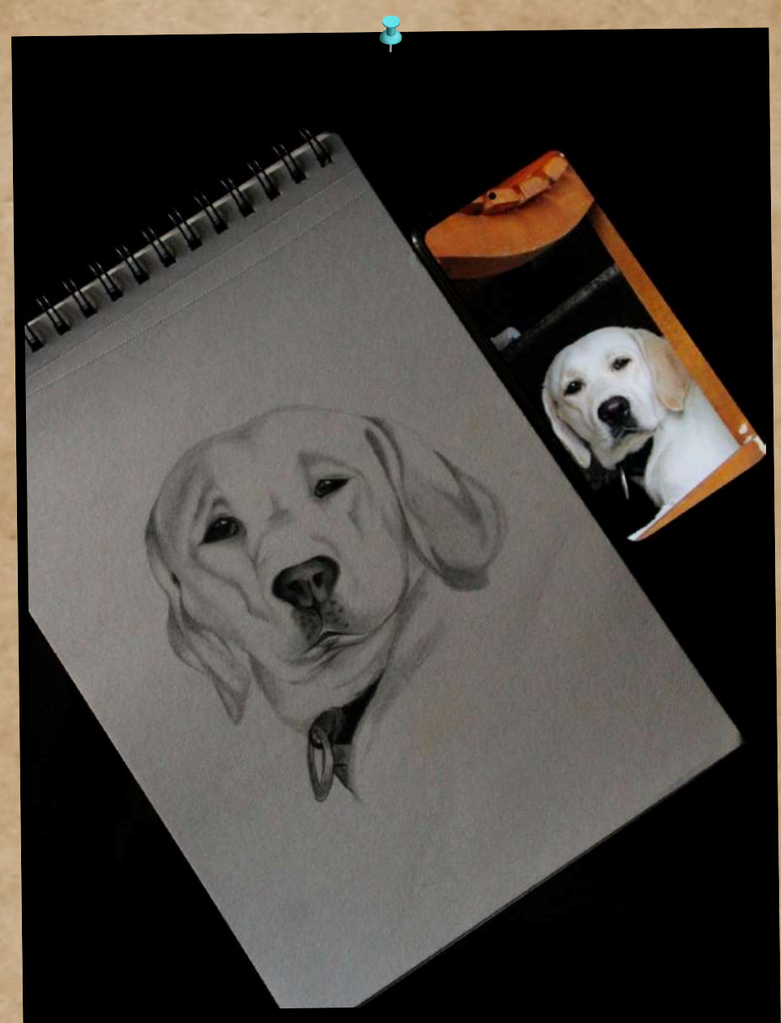


Adithya G Shenoy - 3rd year

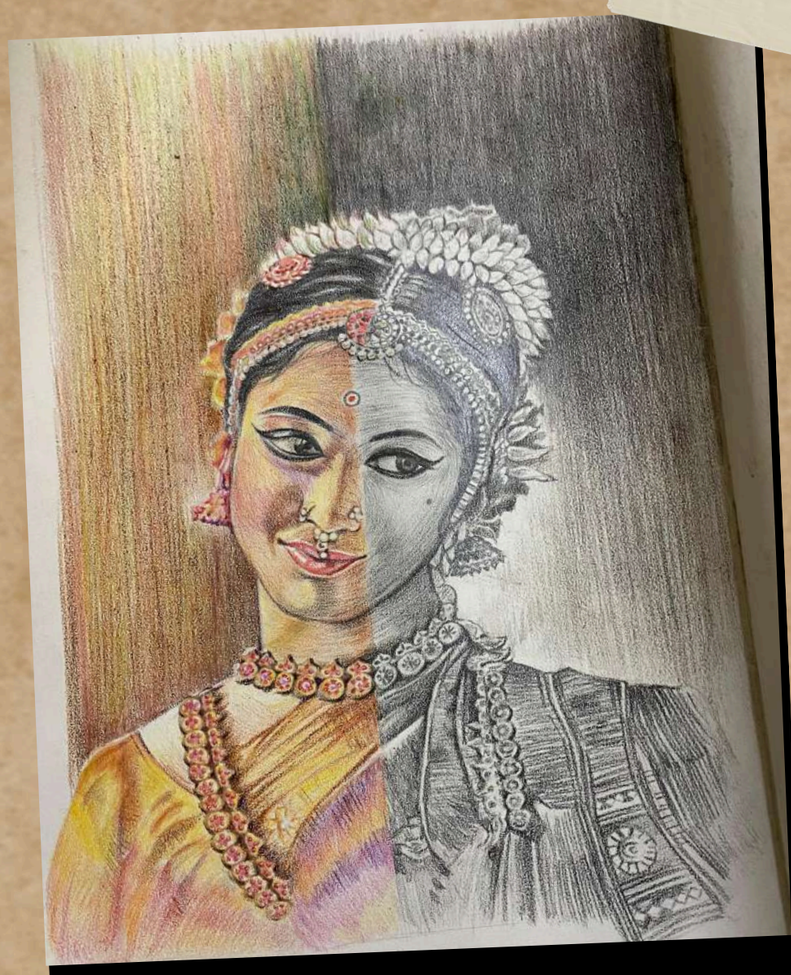
Brinda - 4th year



Adithya G Shenoy

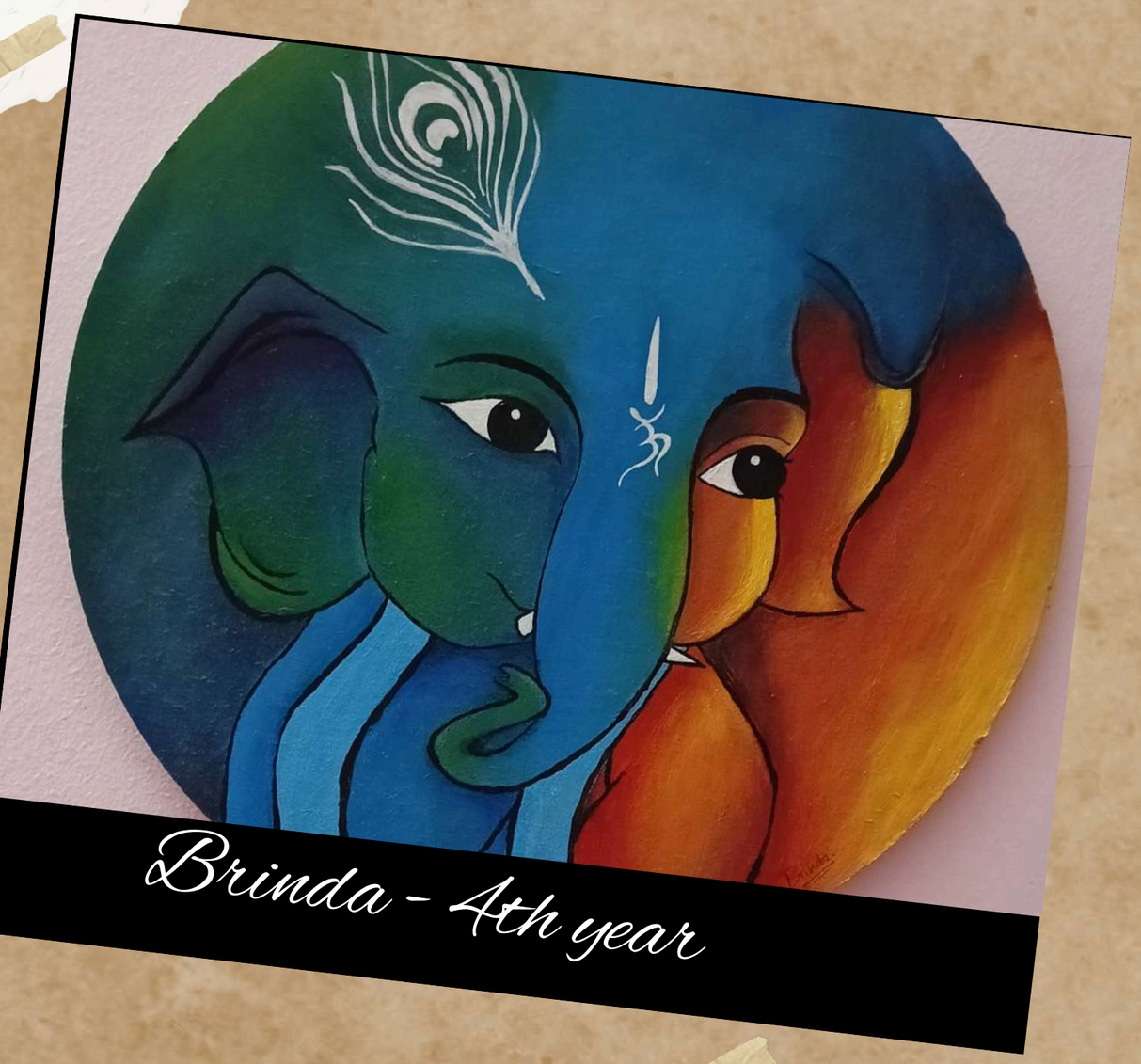


Vaishak - 4th year



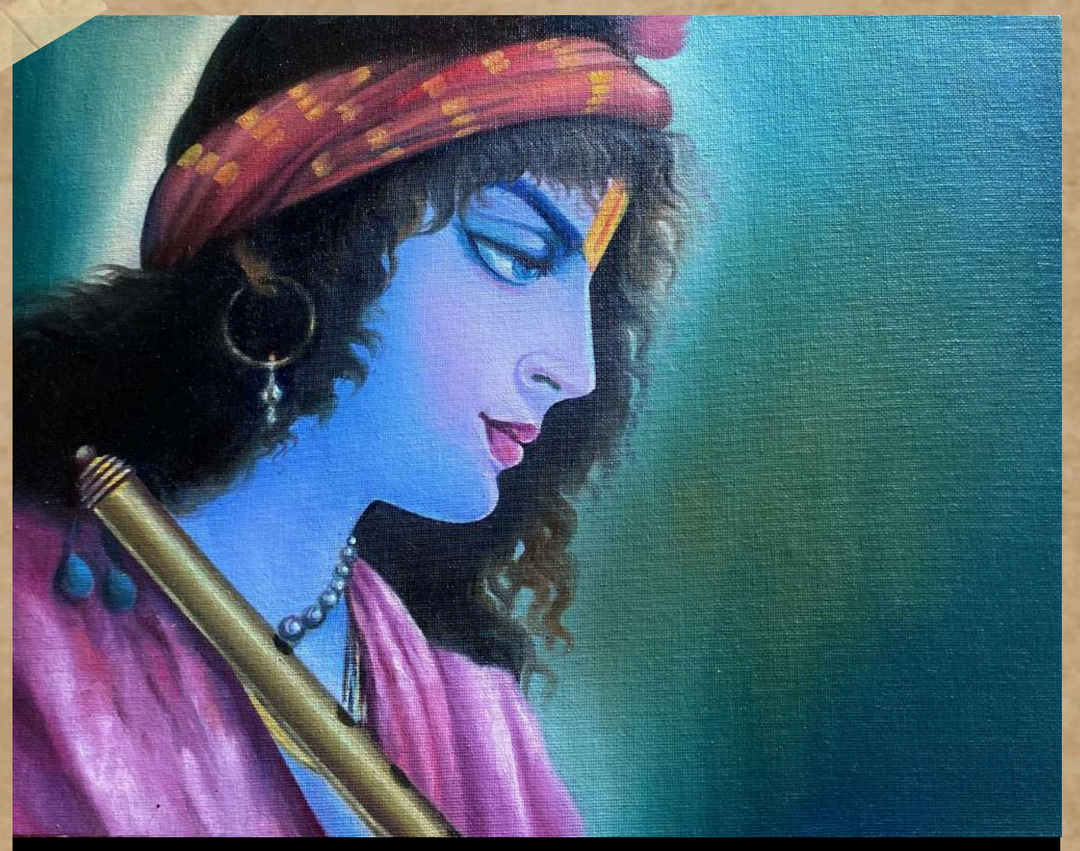
Adithya G Shenoy

PAINT IT RED..

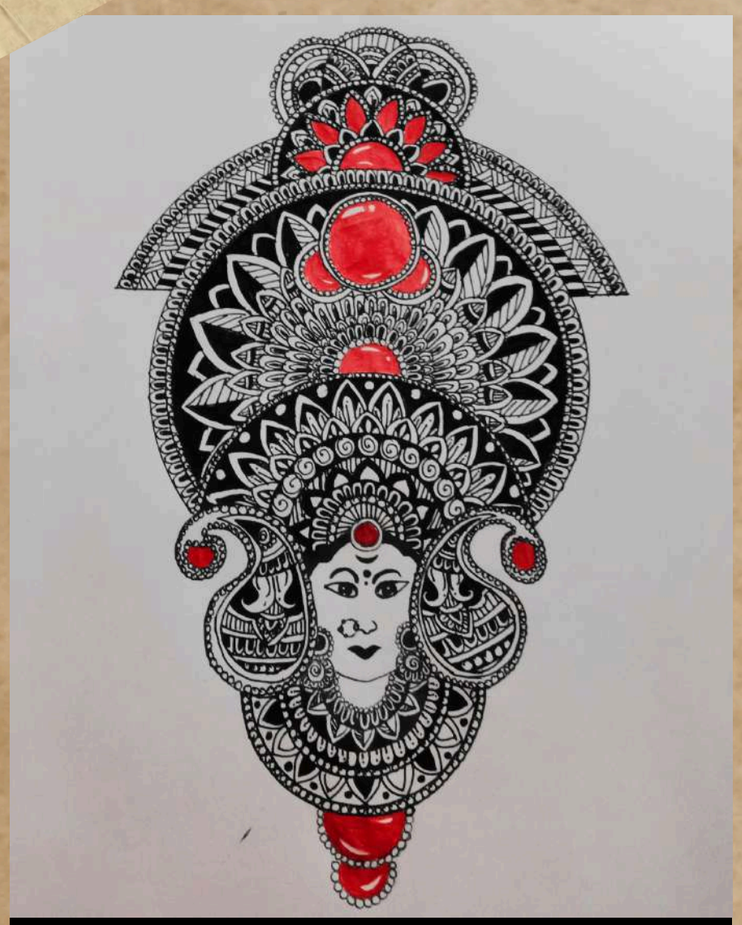


Brinda - 4th year

Adithya G Shenoy - 3rd year



Adithya G Shenoy - 3rd year



Tanushree O - 2nd year

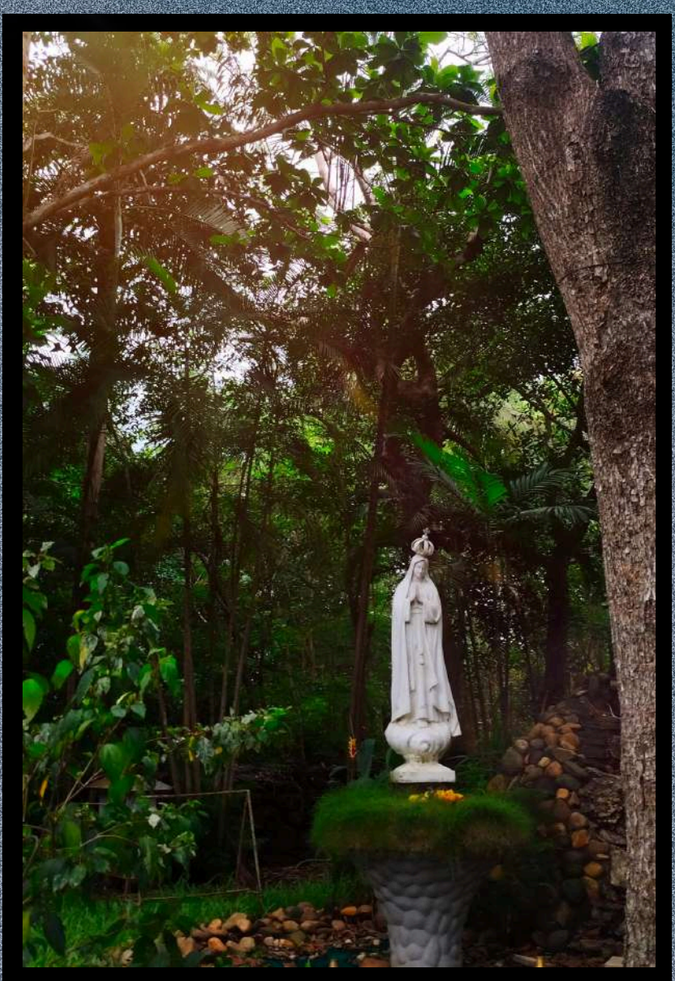
A V LAVANYA - 2nd year

Nandini S P - 2nd year

SHUTTERBUGS

Shravan - 4th year

Swastik Bhandarkar- 3rd Year



Steven Dsouza- 2nd year

Sumith Sagar- 2nd Year

Varsha Gatty - 2nd year

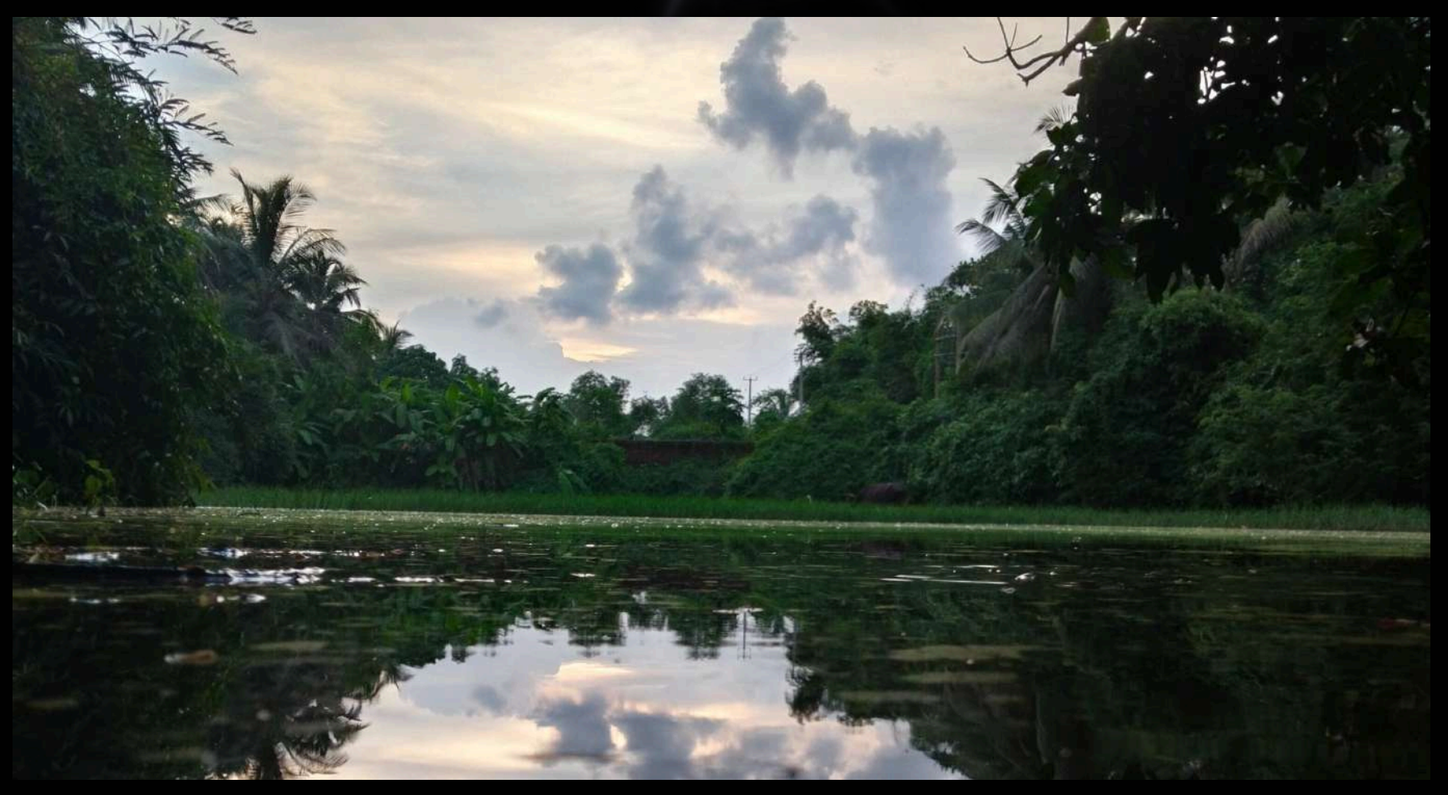
Riyona Lobo - 2nd year

Varsha Gatty - 2nd year

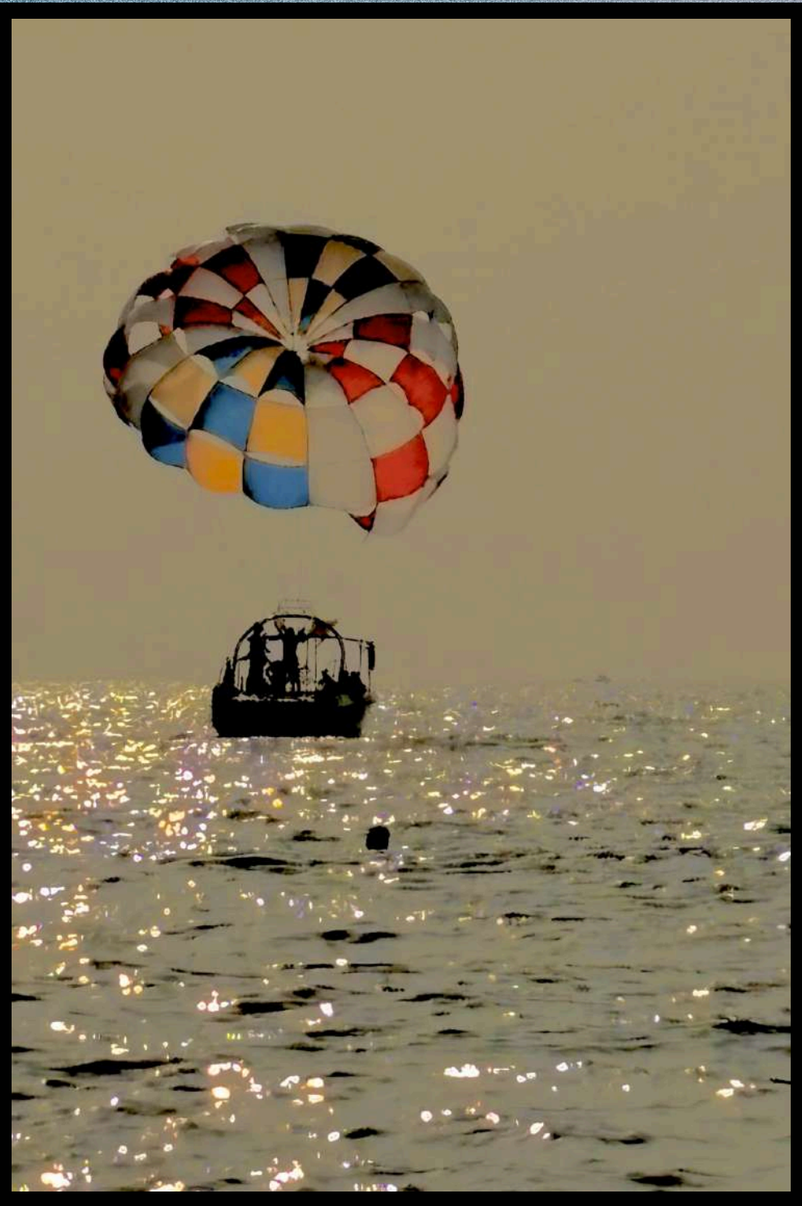
Sanjana - 2nd year

SHUTTERBUGS

Varsha Gatty - 2nd year



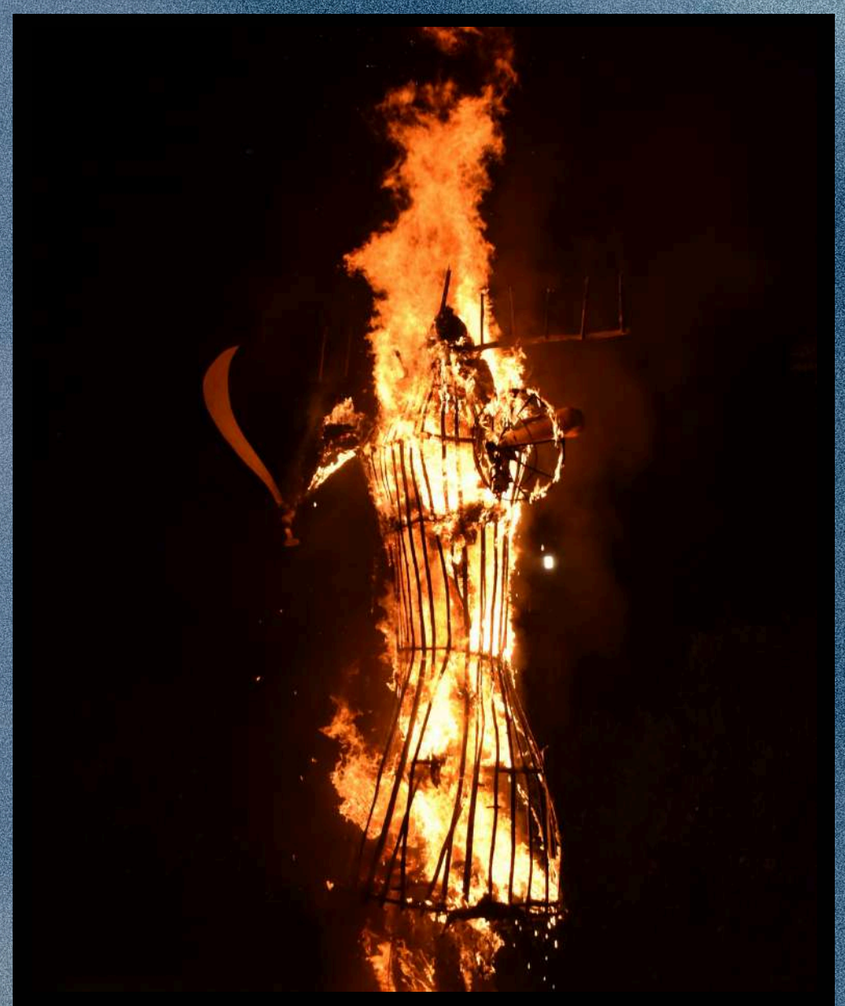
Varsha Gatty - 2nd year



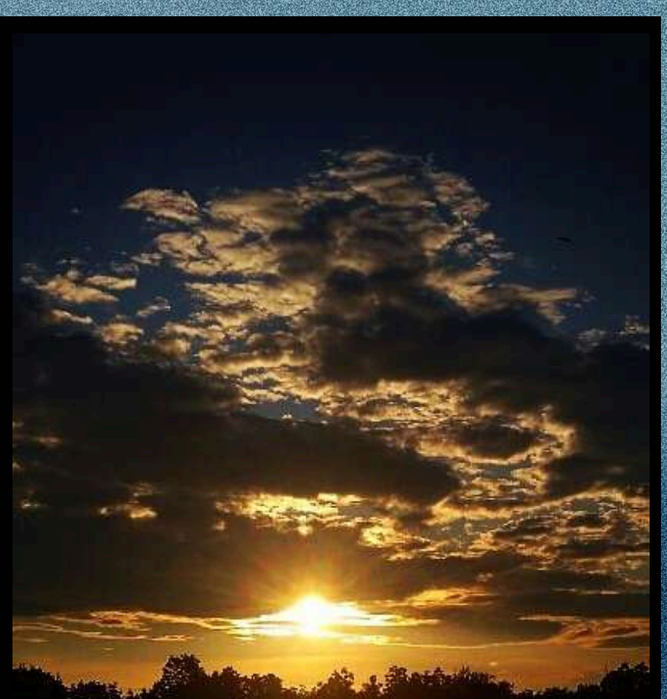
Sanjana- 2nd year

Dave Sylvester Vas Naik-2nd year

Sanjana - 2nd year



Dave Sylvester Vas Naik-2nd year



Sanjana - 2nd year

Dave Sylvester Vas Naik-2nd year

SHUTTERBUGS

Sumith Sagar- 2nd Year

Steven Dsouza- 2nd year

A V Lavanya- 2nd year

Riyona Lobo- 2nd year

Riyona Lobo- 2nd year

Varsha Gatti - 2nd year

Dave Sylvester Vas Naik-2nd year

Your paragraph text

IV Year ECE - A Section

IV Year ECE - B Section

prodigi association

PRODIGI
Genius Within!

SERVICE AND EXCELLENCE
ST JOSEPH ENGINEERING COLLEGE MANGALURU ™

ST JOSEPH ENGINEERING COLLEGE

AN AUTONOMOUS INSTITUTION

AFFILIATED TO VTU BELAGAVI, RECOGNISED BY AICTE NEW DELHI, ACCREDITED BY NAAC WITH A+ GRADE
B.E.(CSE,ECE,EEE,ME,CIV) & MBA, MCA ACCREDITED BY NBA, NEW DELHI)

VAMANJOOR, MANGALURU 575028, KARNATAKA, INDIA PHONE : +91-824-2868100/2263753/54/55/56
FAX: 91-824-2263751 E-MAIL : SJEC@SJEC.AC.IN WEBSITE: WWW.SJEC.AC.IN