IEEE SB SJCET

Annual Report 2024

1. Execom Meeting, Future SIGHT Activities

Venue: St. Joseph's College of Engineering and Technology, Palai

The event was held to thank the execom, faculty, and IEEE members for their support in SIGHT events. Feedback, achievements, and plans for advancing the Student Mentorship Program (SMP) were discussed, with valuable input from all attendees.

The event was organized to acknowledge and appreciate the efforts of the execom members, faculty, and members of IEEE SB SJCET and IEEE SIGHT Group for their active participation in various SIGHT initiatives. The meeting provided a platform for discussing feedback on past events, identifying areas for improvement, and highlighting key achievements.

A significant portion of the discussion focused on advancing the Student Mentorship Program (SMP), outlining its next stages and strategies for future implementation. The collaborative input from all attendees was recognized as valuable for the continued success and impact of SIGHT projects.

2. Annual General Meet (AGM 2024)

Venue: St. Joseph's College of Engineering and Technology, Palai
Date: 09 May 2024

INTRODUCTION

The annual general meeting of IEEE SB SJCET was held on 9th May 2024, Thursday from 3:30 pm to 4:30 pm. The occasion featured talks, the inauguration of the Communication Society (ComSoc) in IEEE SB SJCET, the introduction of fresh executive committee members, recognition of past committee members, the sharing of annual reports, action plans and finally concluded with a photo opportunity.

EVENT OBJECTIVES

- To inaugurate the new Communications Society in IEEE SB SJCET
- To introduce the new executive committee members for 2024 and provide them with an opportunity to introduce themselves to the IEEE SB SJCET.
- To present the annual report of IEEE SB SJCET, highlighting the achievements and activities of the previous year.
- To express gratitude and appreciation to the previous executive committee members for their hard work and dedication which contributed to the success of IEEE SB SJCET.
- To outline the action plan for the upcoming year, including the events and initiatives.

BRIEF DESCRIPTION

The event kicked off with the IEEE Code of Ethics by Ms. Kavya K A, the Treasurer Elect of IEEE SB SJCET. Following the Code of Ethics, Mr Blesson Karikulammalayil Tomy, the Secretary-Elect of the IEEE SB SJCET, gave an Introduction and Welcome Speech, marking the official beginning of the AGM. Next, Ms Devananda S, the Secretary of the IEEE SB SJCET, presented the Annual Report, highlighting the achievements, activities, and progress of the organisation over the past year.

Mr. Akash Vijay, the Chair of IEEE SB SJCET, then addressed the audience and introduced the new Executive Committee members for 2024.

Prof. Sreesh P R, the Branch Counselor of the IEEE SB SJCET, delivered his address, thanking the previous leaders for their hard work and welcoming the new batch of leaders.

Afterwards, the Branch Counselor, Prof. Sreesh PR inaugurated the new Communications Society and welcomed the new office members. Ms Tissa Mary Anil, the Chair-Elect of IEEE ComSoc SBC delivered an inspiring speech about her vision for the society.

Ms Devananda S presented the Action Plan for the coming year and was announced as the Chair-Elect for the IEEE SB SJCET. Finally, Ms. Aleena Johny, the Program Coordinator of IEEE SB SJCET, gave the Vote of Thanks, expressing gratitude to all those who contributed to the event, its organisation and its success. The event concluded with a Photo Session, where participants had the opportunity to capture memories, network and celebrate the occasion.

DEMOGRAPHICS

No of participants: 50
IEEE members: 50
Non-IEEE members: 0

GLIMPSES OF THE EVENT

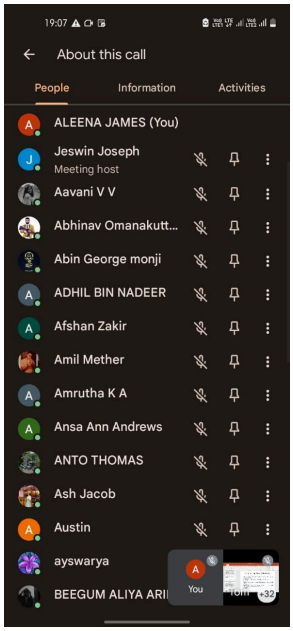
3. AI in Cloud

Venue: Google Meet

The workshop emphasized on real-world applications where AI and cloud computing converge to solve industry-specific problems from healthcare to finance and automation and other numerous case studies were presented, showing how cloud-based AI solutions enhance decision-making, streamline operations, and improve efficiency across sectors.

Another critical aspect of the discussion was that it centered on the future of AI in the cloud, focusing on emerging trends such as AI democratization through cloud accessibility, ethical considerations in cloud-based AI models, and the growing importance of edge AI in cloud environments. Participants actively engaged in discussions on how these trends will shape the technology landscape and how professionals can adapt to them.

The workshop not only provided technical knowledge but also encouraged critical thinking about the broader implications of AI in the cloud. The exchange of ideas during the Q&A and collaborative sessions contributed to a deeper understanding of both the opportunities and challenges of AI.



4. Programmable Logic Controllers (PLC)

Venue: Online Google Meet
Date: 03 July 2024

INTRODUCTION

The session on Programmable Logic Controllers (PLC) was conducted by IEEE SB SJCET to introduce to students the basics of PLC, their uses in future projects for students and how to program and code the controller.

EVENT OBJECTIVES

- To introduce Programmable Logic Controller to students
- Highlight the uses of PLC in the classroom or for future projects
- To introduce the basics of PLC and how it should be programmed

BRIEF DESCRIPTION

The session consisted of 2 parts, each taken by one of the speakers. Initially, the first speaker, Mr. Sreedev Dharman P, S7 ECE AJCE, delved into the architecture, modules, functions and operations that can be performed using the PLC. This session focused on the theory and explained how each module works and also what the expected use of each module is.

The second speaker, Mr. Dani Xavier took the programming and hands on part of the session. He demonstrated how to program PLC using an online software known as LOGO!Soft Comfort. He showed in detail about where it can be downloaded, how to initialise the software and the correct versions. He also explained about the various companies that make the software to program PLCs. He explained about the interface of the software, ‘Ladder Logic’ and how it is used to program the PLC.

Towards the end, the speakers also took questions and advised the participants on where and what they can learn further about PLCs. Overall, the participants were pleased with the scope and depth of the session.

DEMOGRAPHICS

No of participants: 74
IEEE members: 30
Non-IEEE members: 44

GLIMPSES OF THE EVENT

5. Techtonic: Unleashing the Power of AI and 4IR

INTRODUCTION

The Student Community of the IEEE Women in Engineering (WiE) affinity group at IEEE SB SJCET hosted a quiz competition titled "TECTONIC: Unleashing the Power of AI and 4IR". This event was part of the International WiE Day 2024 celebrations, organised in collaboration with IEEE Link Kerala Section and IEEE WiE Kerala Section.

EVENT OBJECTIVES

- Engage more women AI and 4IR
- Increase participants understanding of Artificial Intelligence and Forth Industrial Revolution
- Motivate participants to challenge and strive to excellence
- Develop a healthy competitive through a well-structured quiz competition

BRIEF DESCRIPTION

The registration for the event was arranged through a dedicated google form which was started on 9th July 2024,6.00pm and remained open till 10th July 2024,10. 00pm. The

quiz competition was conducted on Kahoot platform which was well coordinated by the coordinators. The competition aimed to promote knowledge in the fields of Artificial Intelligence and the Fourth Industrial Revolution, providing a platform for participants to showcase their understanding and enthusiasm for these cutting-edge technologies. From the pool of participants, three individuals were selected as winners based on their outstanding performance and were awarded the 1st, 2nd, and 3rd positions and received a certificate of achievement.

DEMOGRAPHICS

No of participants: 33
IEEE members: 14
Non-IEEE members: 19

GLIMPSES OF THE EVENT

6. Webinar on MATLAB SIMULINK

INTRODUCTION

The Student Community of the IEEE Power and Energy Society (PES) affinity group at IEEE SB SJCET hosted a webinar on the **Basics of MATLAB Simulink**

EVENT OBJECTIVE

- Understand key concepts of MATLAB Simulink
- Learn to create, simulate, and analyze complex systems using block diagrams.

BRIEF DESCRIPTION

The registration for the event was arranged through a dedicated google form which started on 25th July 2024, 5:30pm and remained open till 25th July 2024 6:04pm. The webinar was conducted on Google meet platform which was managed by the PES Chair and Vice-Chair. The Secretary hosted the webinar and the chief instructor was Mr. Jojin Thomas, an Assistant professor at SJCET, Palai.

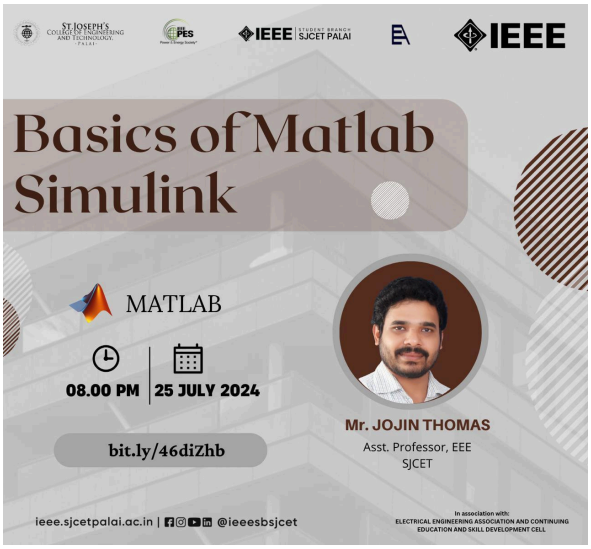
The webinar provided insights on the basics of Matlab Simulink and explained about various tools, blocks and components like source, sink, math, logic and bit operations, signal routing, subsystems, etc. The instructor then proceeded to make a boost converter and explained how to add various electronics components and how to change their values. The webinar also helped to learn how to simulate a circuit and see the graph values of them.

DEMOGRAPHICS

IEEE members: 15

Non-IEEE members: 40

GLIMPSES OF THE EVENT



7. Unlocking the future: Nanosensors and their role in building an efficient nanonetworks

Venue: Online Google Meet
Date: 24 July 2024

INTRODUCTION

The session on Nanosensors and their role in building efficient Nanonetworks conducted by IEEE ComSoc SB SJCET introduced students to the basics of nanosensors, their applications in future projects, and how to integrate and program them for efficient nanonetworks, equipping students with essential knowledge in this cutting-edge technology.

EVENT OBJECTIVES

- Provide a foundational understanding of nanosensors, including their properties and advantages
- Highlight the potential uses of nanosensors in various fields and future student projects
- Encourage innovative thinking and application of nanosensors in real-world scenarios.

BRIEF DESCRIPTION

The session began with an introduction by Jordin James, Vice Chair of the IEEE ComSoc SB SJCET, who welcomed Dr. Ravindra Kumar Jha, Assistant Professor in the EEE Department at IIT Guwahati. Dr. Jha commenced by introducing the IIT Guwahati campus and his colleagues, easing into the main topic. He provided an introductory overview of nanosensors, then explored their scopes, uses, applications, and other pertinent aspects. Dr. Jha's expertise provided students with valuable insights, fostering a deeper understanding and practical application of nanotechnology.

Towards the end of the session, Dr. Jha provided a forward-looking perspective on the future of nanotechnology and nanosensors, outlining emerging trends and potential breakthroughs in the field. He also shared valuable resources and references for further exploration of the topic. The students expressed their appreciation for Dr. Jha's comprehensive presentation and the depth of insights

provided. The session concluded with a vote of thanks by Noyal Mathew Jain, Secretary of the IEEE ComSoc SB SJCET, who thanked Dr. Jha for his engaging presentation and the valuable knowledge shared, officially closing the event.

DEMOGRAPHICS

No of participants: 48
IEEE members: 31
Non-IEEE members: 17

GLIMPSES OF THE EVENT

8.Robotics: Basics of Motion Planning

Platform: Google Meet
Date: 27 July 2024

INTRODUCTION

The webinar titled “Robotics: Basics of Motion Planning” was organised by the IEEE Robotics and Automation Society (RAS) under the aegis of the IEEE Student Branch at St. Joseph's College of Engineering and Technology (SJCET). This event took place on July 27, 2024, from 8:00 PM to 9:00 PM. The session featured an engaging presentation on foundational concepts in motion planning for robotics, followed by an interactive segment where participants could actively engage with the content. Additionally, a comprehensive doubt-clearing session was conducted to address any questions and provide further clarification on the topics discussed.

EVENT OBJECTIVE

- To provide participants with a fundamental understanding of motion planning in robotics, including key principles, techniques, and algorithms used to navigate robotic systems.
- To engage attendees through an interactive presentation that encourages active participation and facilitates a deeper comprehension of the material.
- To address and resolve specific questions and uncertainties related to motion planning, ensuring that attendees gain clear and practical insights into the subject matter.

BRIEF DESCRIPTION

The event began with a warm introduction and welcome speech delivered by Ms. Merin Kurian, Chair of IEEE RAS SB SJCET, who greeted the participants and introduced the key-note speaker, Ms. Anna Thomas. Following this, Ms. Anna Thomas conducted an informative session on foundational concepts in motion planning for robotics, delivering an engaging presentation that captured the audience's attention. The session included a thorough exploration of core principles and was followed by an interactive segment where participants had the opportunity to ask questions and clarify doubts.

This interactive segment allowed attendees to delve deeper into the topics discussed and facilitated a rich exchange of ideas. Ms. Anna Thomas addressed each question with clarity and provided additional insights, ensuring that participants left with a solid

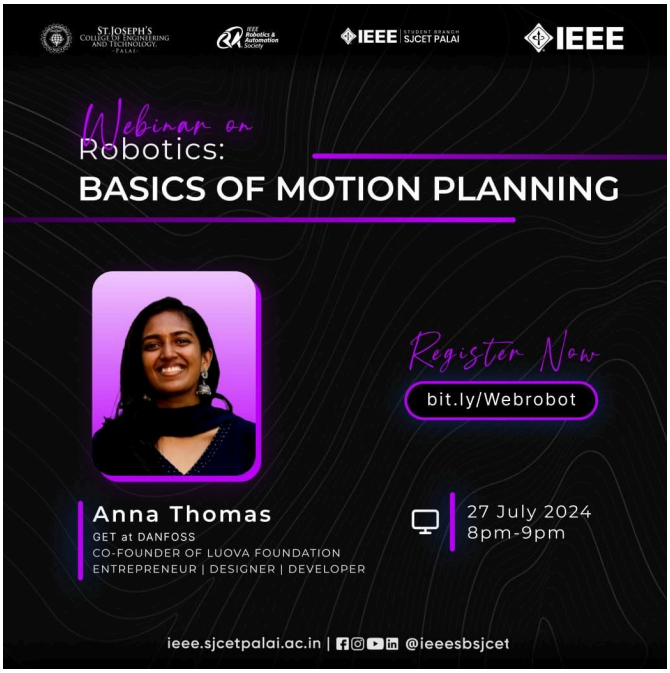
understanding of the subject matter. After the Q&A, Ms. Sandra Theresa Sebastian, Secretary of IEEE RAS SB SJCET, took the stage to deliver the Vote of Thanks.

In her concluding speech, Ms.Sandra Theresa Sebastian expressed heartfelt gratitude to Ms. Anna Thomas for her insightful presentation and to the participants for their active engagement. She also acknowledged the efforts of everyone involved in organizing the event, highlighting their contributions in making the event a success. The event wrapped up on a positive note, with attendees appreciating the valuable knowledge shared and the opportunity to connect with experts in the field.

DEMOGRAPHICS

No of participants: 77
IEEE members: 21
Non-IEEE members: 56

GLIMPSES OF THE EVENT



9. Industrial IoT in Industry 4.O

Venue: Online
Date: 30th July 2024

INTRODUCTION

IEEE IAS SBC SJCET organised an online webinar focused on Industrial IoT in Industry 4.0. The workshop aimed to provide an in-depth understanding of the applications and impact of IoT technologies in modern industrial settings. Participants were introduced to the latest advancements in Industry 4.0, learning how IoT solutions are revolutionising manufacturing processes, enhancing efficiency, and enabling smarter operations. This workshop offered a unique opportunity for attendees to gain knowledge on cutting-edge IoT technologies and their implementation in the industry.

EVENT OBJECTIVE

- To introduce participants to the core concepts and technologies of industrial IoT within the framework of Industry 4.0.
- To demonstrate the practical applications of IoT in the modern industrial process.
- To explore real-world case studies showcasing the impact of IoT on improving efficiency and productivity in manufacturing.
- To discuss the challenges and solutions related to the integration of IoT technologies in existing industrial systems.

BRIEF DESCRIPTION

The Industrial IoT in Industry 4.0 Webinar conducted on 30th July, 2024, was an online event focused on providing participants with a comprehensive understanding of the integration of IoT technologies in modern industrial processes. The webinar was handled by Mr. Tom Thomas, Technical Director & CTO, KTS InfoTech PVT. LTD

The webinar began at 6:30 pm with an introduction to Industrial IoT, emphasising its critical role in the industry 4.0 revolution. The session covered the fundamentals of IoT technologies, including main components, data collection, and connectivity in industrial environments.

Towards the end, participants were actively engaged in a doubt-clearing session, where they had the opportunity to address their queries about IoT, required programming languages, and how to get started with implementing these technologies.

The webinar successfully created an engaging and informative learning environment, giving more insights, and a deeper understanding of the transformative impact of Industrial IoT in Industry 4.0. The meeting concluded at 7:30 pm.

DEMOGRAPHICS

No of participants: 55
IEEE members: 20
Non-IEEE members: 35

GLIMPSES OF THE EVENT

10. Mastering the Art of Interviews: Strategies for Success

Venue: Online
Date:11 August 2024

Introduction

IEEE CS SBC SJCET conducted a mentoring session on the topic “Mastering the Art of Cracking Interviews: Strategies for Success” on August 11th,
2024. It was conducted from 8:30 pm to 9:30 pm on google meet. The session was handled by Mr, Abimel S Kulumala,founder of Silicon Society,Cyber Security Instructor - Redteam Hacker Academy. It was an informative and useful session.

Event Objectives

- Understanding Interview Dynamics
- Developing a Personal Branding Strategy
- Crafting Compelling Responses

Brief Description

IEEE CS SBC SJCET conducted a mentoring session on the topic “Mastering the Art of Cracking Interviews: Strategies for Success” on August 11th,2024. It was conducted from 8:30 pm to 9:30 pm on google meet. The session was handled by Mr, Abimel S Kulumala, founder of Silicon Society,Cyber Security Instructor-Redteam Hacker Academy. A total of 82 participants registered for the event and 51 among them participated in the event. Out of the 51 participants, 30 were IEEE members and 21 were non-IEEE members. Participants gained a clear understanding of how to effectively prepare for different types of interviews, leading to greater confidence and readiness during actual interviews.

Demographic

No of participants: 51
IEEE members: 30
Non-IEEE members: 21

Glimpses of the Event

11. A 7 - Level Smart Home Systems

Venue: Online
Date: 27th August 2024

INTRODUCTION

IEEE SBC CS SJCET hosted an online session titled "A 7 - Level Smart Home System " on 27 August 2024. The speaker for the event was Prof. Mohamed Rawidean, a distinguished speaker and R10 Regional Coordinator of IEEE Computer Society.The talk session focused on the exploration of the A7 Level Smart Home System, which integrates advanced technologies for enhancing residential living. Key features such as automation, energy efficiency, security, and interconnectivity were highlighted, making modern homes more sustainable and secure. The speaker also discussed "Smart City Planning" and "Smart City in 2025".

EVENT OBJECTIVE

- Introducing the 7-level smart home system concept.
- Discuss integration with smart cities.
- Highlight key enabling technologies.
- Explain the benefits of smart homes.
- Address implementation challenges.
- Outline the future vision for smart homes by 2025.

BRIEF DESCRIPTION

The exploration of the A7 Level Smart Home System emphasises the integration of advanced technologies aimed at enhancing the residential living experience. Key features such as home automation, energy efficiency, heightened security, and seamless interconnectivity were highlighted as crucial components in creating modern homes that are both sustainable and secure. These homes employ a combination of sensors, IoT devices, AI-driven automation, and smart energy management systems to optimise daily living. The session also introduced the concept of 'Smart City Planning,' demonstrating how smart homes will eventually integrate into broader smart city frameworks to create cohesive, technology-driven urban environments.

DEMOGRAPHICS

No of participants: 77
IEEE members: 30
Non-IEEE members: 47

GLIMPSES OF THE EVENT

12. Tech Savvy Series: Microsoft Azure

Venue: Online
Date: 8 & 9 August 2024
Time: 8:30pm - 9:30pm

INTRODUCTION

IEEE SB SJCET conducted the Microsoft Azure, as part of the Tech Savvy Series in collaboration with IEEE SB SCE. The session was conducted on the 8th and 9th of August. The session was conducted by Mr. Anshuman Biju, a Microsoft Learning Student Ambassador and the chair of IEEE CS SB SBCE. Held on Microsoft Teams, the session proved to be informative.

EVENT OBJECTIVES

- Basic Understanding of Microsoft Azure
- Understanding the Microsoft Platform
- Understanding Sandbox
- Practical Application of Microsoft Azure

BRIEF DESCRIPTION

The online workshop was conducted from 8.30pm to 9.30pm on the 8th and 9th of August. The first day of the session focused on the basics of Microsoft Azure. The speaker, Mr. Anshuman Biju spent the first day focusing on the basics of Microsoft Azure. He gave the participants a brief idea of why companies and students use Microsoft Azure and the importance of it in the domain of Cloud Computing.

On day 2, the speaker took up some of the participant feedback and brought forward a more practical session. He gave the students a limited time access to a Microsoft Azure environment and guided the students to use it and practise hands on.

DEMOGRAPHICS:
No of participants: 99
IEEE members:
Non-IEEE members:

GLIMPSES OF THE EVENT

13. Talk Session: To build Confidence, Careers and Connections

INTRODUCTION

The **IEEE Women in Engineering Affinity Group at SJCET** hosted a thought-provoking talk session on August 28, 2024, led by **Miss Karthika Krishna**, the Director of Administrations at Insight for Innovation. The event focused on empowering participants to build confidence, advance their careers, and establish meaningful connections.

EVENT OBJECTIVES

- To inspire and empower participants to build self-confidence in both personal and professional spheres.
- To facilitate connections and networking opportunities , encouraging collaboration and professional growth.
- To provide insights and strategies for advancing careers.

- To enhance participants' skills in communication, leadership, and innovation, which are essential for career success.

BRIEF DESCRIPTION

The registration for the event was arranged through a dedicated google form which was started on 27th August 2024,07:30pm and remained open till 28th August 2024,07:00pm. The event planning for the talk session involved careful coordination between the IEEE WIE team at SJCET and the guest speaker,Miss Karthika Krishna. The event was conducted through Google Meet, allowing participants to join remotely and interact with the speaker. The event focused on creating a session that would effectively boost participants' confidence, career prospects, and networking opportunities. The event format included interactive segments to encourage active participation and real-time networking.The talk session was a resounding success, leaving participants inspired and equipped with valuable insights to advance their professional journeys.Overall, the session fulfilled its objectives, marking a significant step towards empowering each one for their future and the responses were really good.

DEMOGRAPHICS

No of participants: 37
IEEE members: 15
Non-IEEE members: 22

GLIMPSES OF THE EVENT

14. Propagate: Introduction to IEEE IA/IE/PELS Societies

Venue : Online
Date : 19 September 2024

INTRODUCTION:

On 19th September 2024, IEEE IAS Student Branch Chapters of CE Kidangoor,SJCET and SAINTGITS in collaboration with IEEE IA/IE/PELS Jt.Chapter Kerala, organized a membership development session titled “Propagate”. The session aimed to highlight the various advantages of being a member of IEEE Industry Applications Society (IAS), Industrial Electronics Society (IES), and Power Electronics Society (PELS).

GOAL OF THE EVENT:

The main goal of the event is to provide participants an introduction to IA/IE/PELS societies. The session included presentations, discussions focused on identifying opportunities for growth. The MD session successfully fostered a collaborative atmosphere.
The primary objectives of the event were as follows:

- To create awareness about the benefits of IEEE membership, particularly within the IAS, IES, and PELS societies.
- To showcase the resources, networking opportunities, and professional development avenues available to IEEE members.
- To encourage students and professionals to become active members of IEEE societies and contribute to their respective fields.

EVENT DESCRIPTION:

Propagate, introduction to IA/IE/PELS societies is an membership development session organised by IEEE IAS SBC CE KIDANGOOR, IEEE IAS SBC SJCET and IEEE IAS SBC SAINTGITS held as part of LA GUERRE 2.0 an cluster war competition hosted by IEEE IA/IE/PELS Jt.Chapter Kerala.
The session was held online on 19 September 2024 at 8 PM. The session was handled by speakers Mr.Amal M (Designer, IEEE IA/IE/PELS Jt.Chapter Kerala) and Mr.Mohammed Risal

(Travancore Hub SR,IEEE IA/IE/PELS Jt.Chapter Kerala). The online meeting provided a platform for sharing ideas and presentation of current membership statistics.

EXPECTED OUTCOME:

The event aimed to achieve the following outcomes:

- Participants gain a better understanding of the advantages of IEEE membership.
- Participants express interest in becoming IEEE members and joining IAS, IES, and PELS societies.
- Increased collaboration and networking among students and professionals within the IEEE community.

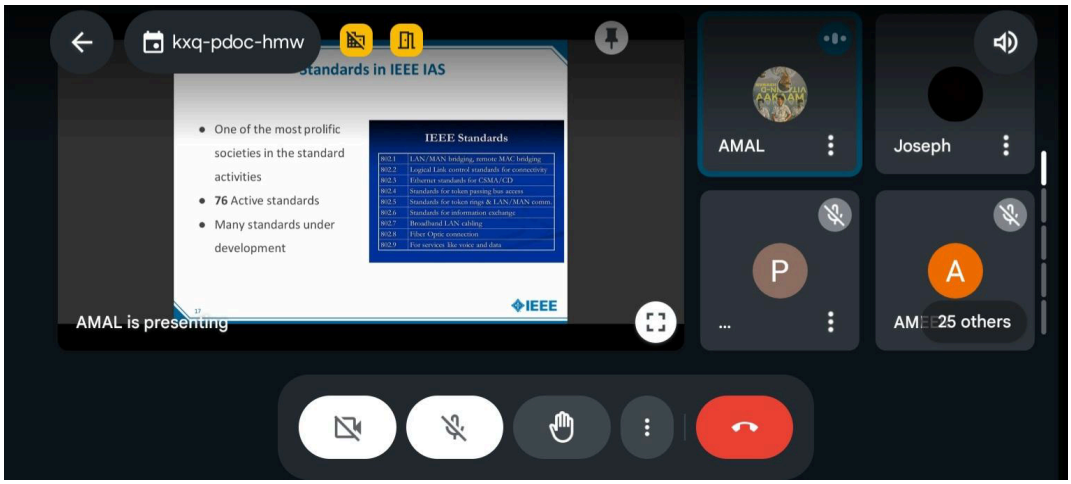
DEMOGRAPHICS:

No of registrations : 80
IEEE members: 13
Non-IEEE members: 67

PLANNING:

The event was meticulously planned by the organizing committees of the participating IEEE Student Branch Chapters. Speakers were carefully selected to cover different aspects of IEEE membership benefits. The event was promoted through various communication channels to ensure maximum participation.

GLIMPSES OF EVENT:



15. Powernova: Power Electronics Trends in Solar Industry

EVENT DETAILS:

- **Event Name:** POWERNOVA
- **Event Type:** Online Webinar
- **Topic:** Power Electronics Trends in Solar Industry
- **Date:** 23rd September 2024
- **Time:** 7:00 PM to 8:00 PM (IST)
- **Speaker:** Mr. Abhinav R., Director, Bumblebee Instruments Pvt. Ltd.

INTRODUCTION:

"POWERNOVA" was an insightful session focused on emerging trends in power electronics within the solar industry. The event was organized as part of **La Guerre 2.0**, in collaboration with IEEE IAS SBC SJCET, IEEE IAS SBC SAINTGITS, and IEEE IAS SBC CEK. Held on the 23rd of September 2024, the session aimed to provide participants with technical knowledge

about the integration of power electronics in solar energy systems, a growing field in the renewable energy sector.

EVENT OBJECTIVE:

- To educate and enlighten engineering students and professionals on how power electronics is shaping the future of the solar industry.
- To focus on technological advancements, industry standards, and real-world application scenarios in the solar industry.
- To equip participants with a solid understanding of how power electronics optimizes solar power systems for improved efficiency, reliability, and sustainability.

BRIEF DESCRIPTION OF THE EVENT:

The webinar took place on **23rd September 2024**, from **7:00 PM to 8:00 PM (IST)** in **online mode**. The resource person for the session was **Mr. Abhinav R.**, Director of Bumblebee Instruments Pvt. Ltd., an expert in power electronics and solar technology.

The session began with an introduction to the fundamentals of power electronics and how these technologies are applied in solar energy systems. **Mr. Abhinav** shared his extensive industry experience and provided technical insights into the latest innovations in power electronics, including advancements in power converters, inverters, and energy storage systems. He also elaborated on how these innovations are enhancing solar power generation and distribution, making systems more efficient and sustainable. His presentation highlighted how power electronics is a critical component in managing solar power grids, and how it plays a key role in improving the overall performance of renewable energy systems. The audience was captivated by his deep technical knowledge and clear explanations of how power electronics supports the future of solar energy technology.

EXPECTED OUTCOMES:

- The session is expected to provide participants with a deeper understanding of the role power electronics plays in enhancing the performance and efficiency of solar energy systems.
- Attendees gain insights into current trends and future technologies that will shape the power electronics landscape in renewable energy.
- Participants are exposed to real-world applications, which help bridge the gap between academic knowledge and industry practices.
- Students are encouraged to explore career opportunities in the growing solar industry and power electronics field, equipping them with the knowledge to tackle industry challenges related to sustainability and energy management.

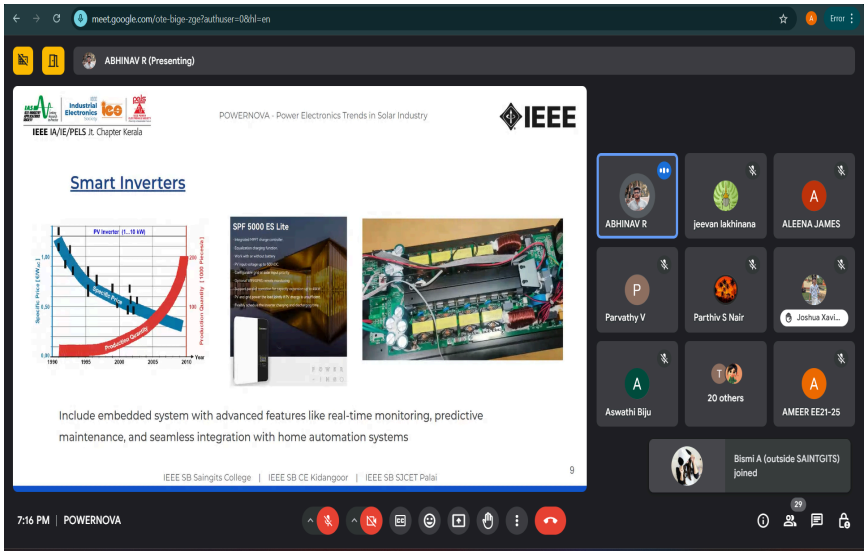
DEMOGRAPHICS:

- **Number of Registrations: 31**
- **IEEE Members:** 8
- **Non-IEEE Members:** 23

PLANNING:

The event was meticulously planned and executed by the organizing committees of the participating IEEE Student Branch Chapters. **Mr. Abhinav R.** was selected as the speaker for his expertise in the field of power electronics and his significant contributions to the solar industry. The event was promoted via multiple communication channels to ensure a wide reach and maximum participation from students and professionals.

GLIMPSES OF THE EVENT:



16. Beyond the Lens

Venue: Google Form
Date: 25th September 2024

INTRODUCTION

The "Beyond the Lens" program, conducted by IEEE ComSoc SB SJCET, was a unique Photo_to_essay competition designed to challenge students' analytical and creative skills . Participants were provided with a photograph and asked to write an essay based on thei r interpretation and understanding of the image, then upload their essays to a specified G oogle Drive link.

EVENT OBJECTIVE

- Inspire participants to creatively interpret and analyze visual content
- Develop participants' critical thinking and writing skills through essay composition

- Provide a platform for students to express their perspectives and insights based on the giv en photograph

BRIEF DESCRIPTION

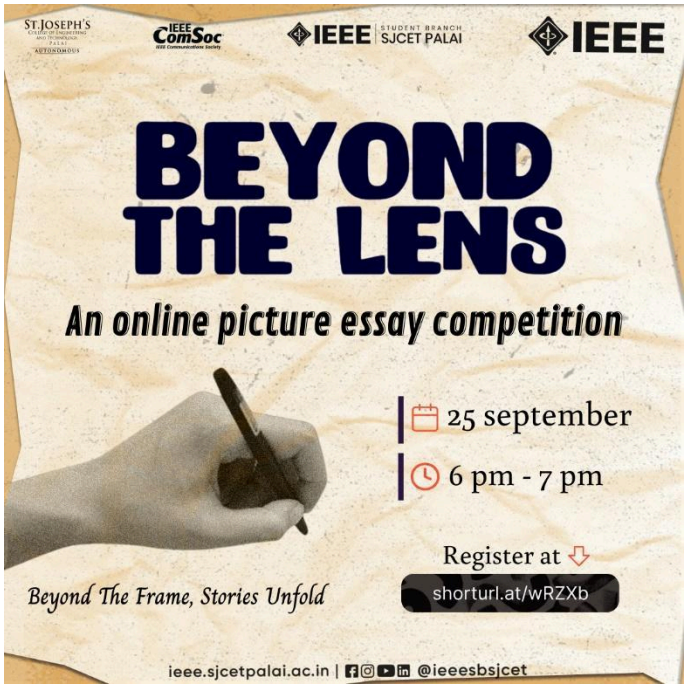
The event revolved around a central photograph provided to all participants. Students wer e tasked with analyzing the image and crafting an essay that conveyed their personal unde rstanding and narrative derived from the visual content. This competition aimed to blend t he art of photography with the power of words, pushing students to explore
the depth of their creativity.
Essays were evaluated on the following criteria:

- **Originality**: How unique and creative the interpretation is
- **Depth of Analysis**: The level of insight and critical thinking demonstrated
- **Narrative Coherence**: The ability to convey a clear and compelling story
- **Technical Proficiency**: Grammar, spelling, and overall quality of writing

Students uploaded their completed essays to a designated Google Drive link, ensuring a s mooth and organized submission process.

DEMOGRAPHICS
No of participants: 12
IEEE members: 8
Non-IEEE members: 4

GLIMPSES OF THE EVENT



WINNERS

CONCLUSION

The "Beyond the Lens" competition successfully provided a platform for students to merge their visual and literary talents, demonstrating the power of photography as a storytelling medium. Th e participants showcased remarkable creativity and insight in their essays, highlighting the depth and diversity of interpretations that a single image can inspire.

17. Webinar on Microcontrollers and Programming Languages

INTRODUCTION

The Student Community of the IEEE Power and Energy Society (PES) affinity group at IEEE SB SJCET hosted a **webinar on Microcontrollers and Programming Language**

EVENT OBJECTIVE

- Explore the world of embedded systems.
- Understand key concepts on Microcontrollers
- Master microcontroller programming

BRIEF DESCRIPTION

The registration for the event was arranged through a dedicated google form which started on 24th September 2024, 08:00 A.M. and remained open till 25th July 2024 9:30 P.M. The webinar was conducted on Google meet platform which was managed by the PES Chair and Vice-Chair. The Secretary hosted the webinar and the chief instructor was Mr. Deva Prakash, a student at College of Engineering, Adoor. The session covered various microcontroller families, communication protocols, development boards, and key concepts like ADCs, DACs, timers/counters, and PWM.

The webinar began with an introduction to microcontrollers, explaining components such as the Watchdog Timer (WDT), interrupts, power management (sleep modes), and the bootloader. The presentation showcased popular microcontroller families including AVR, PIC, ARM Cortex-M, and ESP32/ESP8266, providing a comprehensive overview of their features and applications.

In the segment on communication protocols, Deva Prakash highlighted the importance of UART (Universal Asynchronous Receiver/Transmitter) for serial communication between microcontrollers and peripherals, SPI (Serial Peripheral Interface) for synchronous serial communication, and I2C (Inter-Integrated Circuit) for efficient multi-device communication over just two wires.

The discussion then shifted to development boards, featuring examples like Arduino Uno, Arduino Mega, STM32 Blue Pill, Digispark, Lilypad, ESP32, and Raspberry Pi. Each board was presented with its unique characteristics and suitable use cases, offering valuable insights into their practical applications.

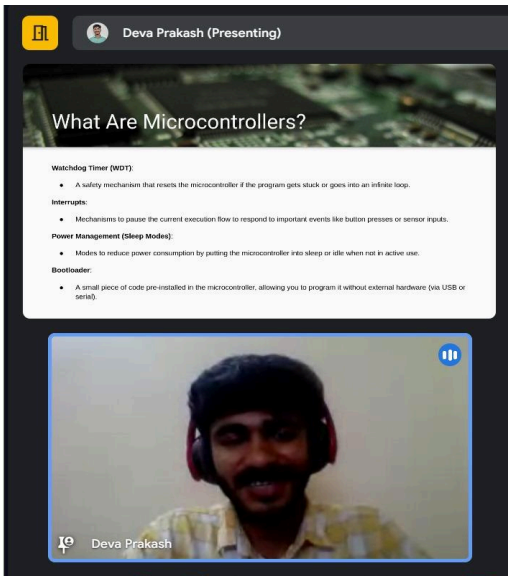
Key concepts in microcontroller programming were thoroughly covered, including Analog-to-Digital Converters (ADCs) that convert analog signals into digital data,

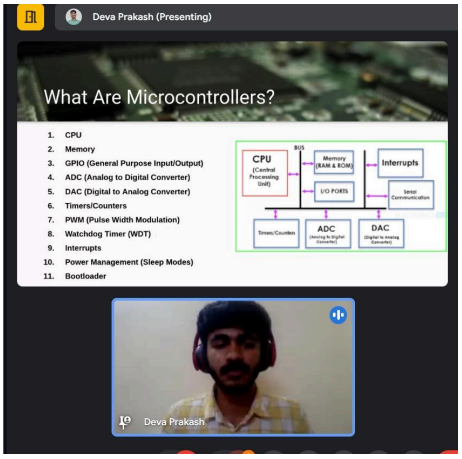
Digital-to-Analog Converters (DACs) that bring digital data back to the analog realm, and timers/counters essential for time-based events in programming, such as creating delays or measuring time intervals. Additionally, Pulse Width Modulation (PWM) was discussed as a technique for controlling the power delivered to electrical devices, making it ideal for motor control and LED dimming.

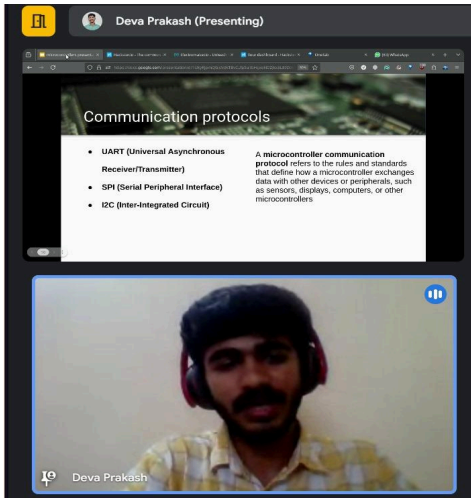
DEMOGRAPHICS

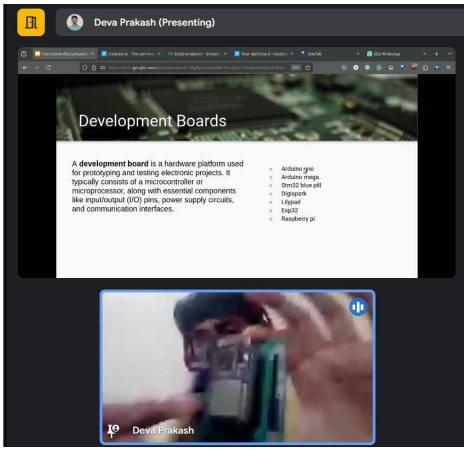
No of participants: 48
IEEE members: 27
Non-IEEE members: 21

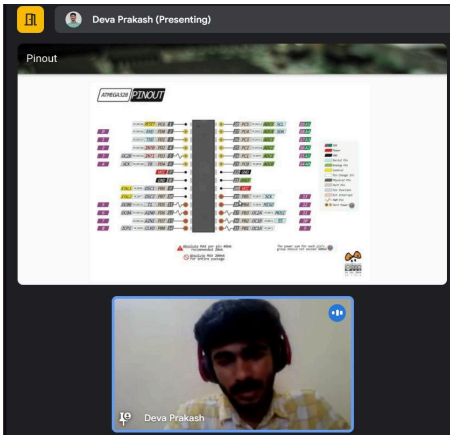
GLIMPSES OF THE EVENT

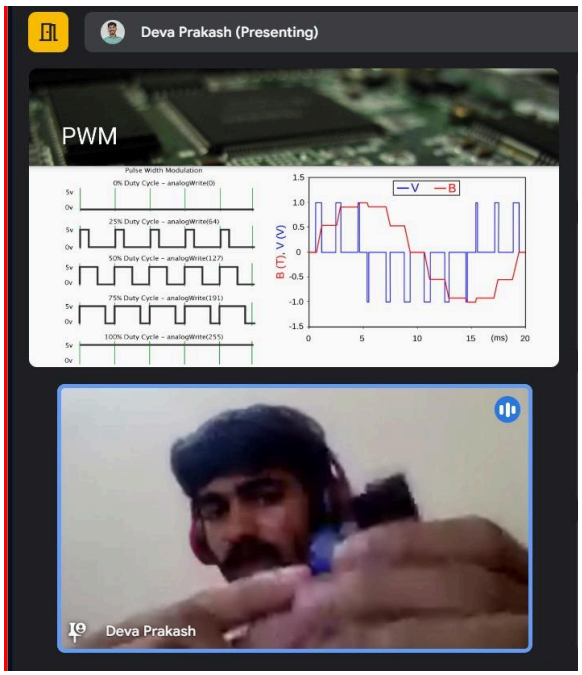



Deva Prakash (Presenting)
What Are Microcontrollers?
1. CPU
2. Memory
3. GPIO (General Purpose Input/Output)
4. ADC (Analog to Digital Converter)
5. DAC (Digital to Analog Converter)
6. Timers/Counters
7. PWM (Pulse Width Modulation)
8. Watchdog Timer (WDT)
9. Interrupts
10. Power Management (Sleep Modes)
11. Bootloader
CPU
Memory (RAM & ROM)
Interrupts
I/O PORTS
ADC
DAC
Deva Prakash


Deva Prakash (Presenting)
Communication protocols
UART (Universal Asynchronous Receiver/Transmitter)
SPI (Serial Peripheral Interface)
I2C (Inter-Integrated Circuit)
A microcontroller communication protocol refers to the rules and standards that define how a microcontroller exchanges data with other devices or peripherals, such as sensors, displays, computers, or other microcontrollers
Deva Prakash


Deva Prakash (Presenting)
Development Boards
A development board is a hardware platform used for prototyping and testing electronic projects. It typically consists of a microcontroller or microprocessor, along with essential components like input/output (I/O) pins, power supply circuits, and communication interfaces.
Arduino Uno
Arduino mega
Stm32 blue pill
Digispark
Lilypad
Esp32
Raspberry pi
Deva Prakash


Deva Prakash (Presenting)
Pinout
ATMEGA328 PINOUT
Deva Prakash


Deva Prakash (Presenting)
PWM
Pulse Width Modulation
0% Duty Cycle – analogWrite(0)
25% Duty Cycle – analogWrite(64)
50% Duty Cycle – analogWrite(127)
75% Duty Cycle – analogWrite(191)
100% Duty Cycle – analogWrite(255)
5v
0v
V
B
B (T), V (V)
(ms)
Deva Prakash

18. Introduction to Wireless and 5G Security

Venue: Online Google Meet

Date: 24 September 2024

INTRODUCTION

The session on "Introduction to Wireless and 5G Security," conducted by IEEE ComSoc SB SJCET, aimed to introduce students to the foundational aspects of wireless communication and the critical security challenges that arise with the advancement of 5G technology. The event focused on enhancing students' understanding of the growing concerns in wireless and 5G networks, providing them with the knowledge required to tackle modern cybersecurity issues.

EVENT OBJECTIVE

- Provide a comprehensive introduction to wireless communication technologies and security threats
- Explain the security frameworks and protocols essential for 5G networks
- Highlight potential security risks in real-world wireless systems and how to mitigate them

BRIEF DESCRIPTION

The session, led by **Mr. Ruben Shibu**, a renowned cybersecurity expert specializing in 5G and wireless security systems, started with a detailed introduction to the evolution of wireless technology, covering key concepts of wireless communication, and gradually transitioned into the security challenges posed by 5G networks.

Mr. Ruben took a deep dive into the area of cybersecurity, making the session interactive and engaging. His presentation was well-structured and far from boring, keeping all participants actively involved. He discussed the vulnerabilities and attack vectors in 5G, such as data breaches and network intrusions, while emphasizing the importance of encryption and security protocols to safeguard user data.

Throughout the session, Mr. Ruben made sure to address every question raised by the participants, clearing all their doubts. His ability to explain complex topics in an interesting and understandable manner ensured that everyone remained attentive and engaged throughout the event. His practical examples and insights made the session both informative and enjoyable.

DEMOGRAPHICS

No of participants: 40

IEEE members: 31

Non-IEEE members: 9

GLIMPSES OF THE EVENT

19. Introduction to Operational Technology Cybersecurity

Venue: Online Zoom Meet
Date: 30th September 2024

INTRODUCTION:

The webinar "Introduction to Operational Technology Cybersecurity" was an insightful session focusing on the growing importance of cybersecurity in the operational technology (OT) space. Organized by IEEE IAS SBC SJCET, the event aimed to provide engineering students and professionals with an understanding of cybersecurity measures critical to protecting OT systems, which form the backbone of industries such as energy, manufacturing, and transportation.

EVENT OBJECTIVE:

- To introduce participants to the core concepts of OT cybersecurity.
- To raise awareness about the threats and vulnerabilities specific to OT environments.
- To highlight real-world challenges faced by industries in securing OT infrastructure.
- To explore career opportunities and skill development in the growing field of OT cybersecurity.

BRIEF DESCRIPTION OF THE EVENT:

The webinar took place on **30th September 2024** from **6:30 PM to 7:30 PM** (IST) via Zoom Meet. The keynote speaker was **Mr. Sakthi Kumar Manohar**, an expert in OT cybersecurity with extensive experience in the field of industrial control systems (ICS) and product security.

The session began with an introduction to the basics of OT cybersecurity, distinguishing it from traditional IT security. Mr. Sakthi highlighted how OT systems, such as SCADA and PLCs, are increasingly targeted by cyber threats as industries adopt digitalization and the Industrial Internet of Things (IIoT).

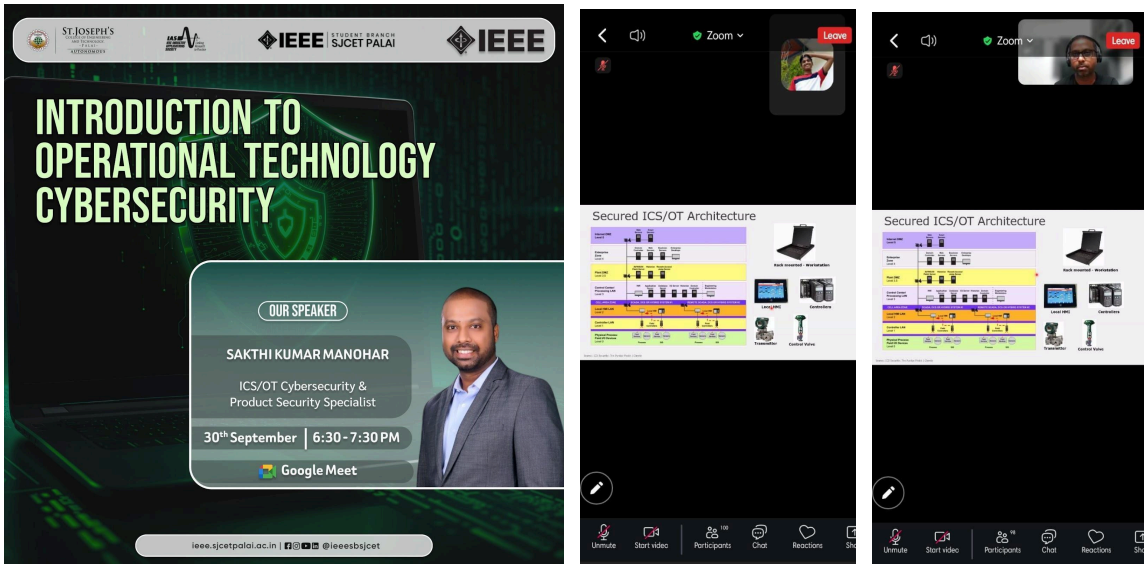
He provided valuable insights into the most common vulnerabilities found in OT systems, such as outdated protocols, lack of encryption, and insufficient monitoring. Mr. Sakthi also discussed real-world cyber incidents that have disrupted critical infrastructure, emphasizing the urgent need for industries to implement robust security measures.

His presentation concluded with an overview of best practices for securing OT environments, including network segmentation, real-time monitoring, and the integration of security into product design and development processes.

DEMOGRAPHICS:

- **IEEE Members:** 21
- **Non-IEEE Members:** 79

GLIMPSES OF THE EVENT:



20. GETTING STARTED WITH PYTHON

INTRODUCTION

The IEEE SIGHT SB SJCET , proudly hosted an engaging online event titled "Getting Started with Python." This event was designed to empower students who are new to programming by providing them with essential skills and knowledge in Python, one of the most versatile and widely-used programming languages today.

EVENT OBJECTIVE

- Introduce fundamental programming concepts through Python.
- Ensure a solid understanding of core programming skills.
- Enable further learning and development in programming.

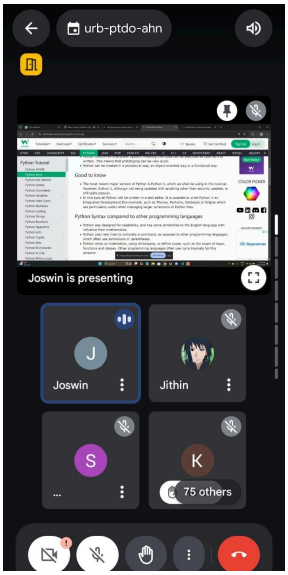
BRIEF DESCRIPTION

On October 1, 2024, from 7 PM to 9 PM, Joswin Emmanuel, a final-year Computer Science student at SJCET Palai, led the session, offering a comprehensive introduction to Python. The interactive format included live coding demonstrations that covered essential programming concepts such as variables, data types, loops, conditionals, and functions. Participants were encouraged to engage actively, with a lively Q&A segment that allowed for in-depth discussion and clarification of concepts. The event concluded with positive feedback from participants, many of whom expressed enthusiasm for additional programming workshops, thus fulfilling its goal of fostering foundational programming skills and enhancing students' readiness for future careers in technology.

DEMOGRAPHICS

IEEE members: 20

Non-IEEE members: 60



21. The Meme-ification of Code:Where Code Meets Comedy

INTRODUCTION

The IEEE Women in Engineering Affinity Group at SJCET hosted **"The Meme-ification of Code: Where Code Meets Comedy"**. This unique and creative event aimed to merge the world of programming with humor by inviting participants to create memes based on the theme **"Coding struggles if programming languages were people".** The event encouraged participants to explore the lighter side of coding while showcasing their creativity and wit.

EVENT OBJECTIVES

- Encourage participants to creatively express their understanding of programming concepts and struggles through humorous memes.
- Highlight the unique characteristics, challenges, and quirks of various programming languages in an entertaining format.
- To give a platform to showcase their talent.
- Allow participants to learn about the nuances of programming and technology in an engaging, non-technical manner.

BRIEF DESCRIPTION

The registration for the competition was arranged through a dedicated Google Form. It was made accessible starting from **27th August 2024, 7:30 PM**, and remained open until **28th August**

2024, 7:00 PM. This streamlined registration process ensured smooth participant onboarding for the competition. The competition was conducted in a fully virtual format, with strict rules and guidelines in place, including specifications on the format, originality criteria, submission limits, and the designated method of submission. The event aimed to create a platform where participants could combine humour and technical knowledge while fostering creativity and engagement. At the conclusion of the event, a **winner was identified based on creativity, humour, and relevance to the theme**.

DEMOGRAPHICS

No of participants: 5
IEEE members: 2
Non-IEEE members: 3

GLIMPSES OF THE EVENT

22. Astroquest

Venue:online
Date:9 October 2024

INTRODUCTION

In honor of Space Week 2024, IEEE SBC CS SJCET organized *Astroquest*, an exciting online quiz competition on October 9, 2024. This event aimed to inspire students to explore the mysteries of space and deepen their understanding of astronomy, astrophysics, and space missions. With space exploration playing a crucial role in technological advancement, the quiz encouraged participants to engage with topics ranging from historical space achievements to cutting-edge technologies shaping the future of space exploration. The competition provided an interactive platform for students to challenge their knowledge and celebrate the wonders of the cosmos.

EVENT OBJECTIVES

- Foster interest in space exploration among students.
- Encourage self-learning and curiosity about the universe.
- Provide a platform for participants to showcase their knowledge in space-related topics.
- Highlight significant milestones in space exploration history and the role of various space agencies.
- Inspire participants to explore careers in space science, astrophysics, and aerospace engineering.
- Promote teamwork and healthy competition through a collaborative learning experience.

BRIEF DESCRIPTION

The *Astroquest* quiz attracted over 80 participants, offering a dynamic and competitive environment. Conducted on the Quiziz platform, the competition covered topics such as astronomy, space missions, and celestial phenomena. Alex S Vanissery secured the runner-up position, winning Rs. 250, while Nikitha Mathew

took first place, earning Rs. 500. The event was a success, fostering interest in space exploration and contributing to the excitement of Space Week celebrations.

DEMOGRAPHICS

No of participants: 84

IEEE members: 30

Non-IEEE members: 54

GLIMPSES OF THE EVENT

23. Talk Session on "A Chat with an Electrical Engineer: Expertise & Insights"

INTRODUCTION

On the evening of October 30th, IEEE PES SB SJCET hosted an exclusive talk session titled "A Chat with an Electrical Engineer: Expertise & Insights." The event was well-received and saw active participation from students and faculty alike.

EVENT OBJECTIVE

- Provide an insightful talk session on electrical engineering with a focus on power systems and embedded systems.
- Enhance the knowledge and understanding of students and faculty members.
- Encourage engagement and interaction through an interactive Q&A session.
- Understand key roles in engineering career paths.
- Highlight essential skills for engineers.
- Discuss internship opportunities and necessary skills.

BRIEF DESCRIPTION

The registration for the event was conducted through a Google Form, which opened on October 24th, 2024, at 8:00 A.M. and remained open until October 29th, 2024, 9:30 P.M. The session was held virtually on the Google Meet platform, managed by the PES Chair and Vice-Chair, and hosted by the Secretary. Mr. Sanjo Sibi Moolamkunnam, an esteemed Electrical Power Systems Engineer at Hatch, Houston, TX, USA, and the founding chair of the IEEE Power and Energy Society Student Branch at SJCET, was the chief speaker. The session began with a warm welcome from the host, followed by an insightful presentation from Mr. Sanjo, where he shared his educational background and work experience, setting the stage for the discussions that followed.

Mr. Sanjo covered various topics during his presentation, including an overview of medium-voltage and low-voltage switchgear, highlighting their components and functionalities. He provided a detailed explanation of the Uninterruptible Power Supply (UPS) internal components and features and discussed the automation equipment used in power systems, such as Real Time Automation Controllers (RTAC), Intelligent Electronic Devices (IED), and Network Switches. He then delved into the field of mining operations, explaining different types of mining and the machinery used, and showcased various mining processes, equipment, and real-world applications.

In addition, Mr. Sanjo highlighted the journey from entry-level positions to senior roles in engineering careers, discussing the required skills and years of experience needed for career progression. He emphasised the importance of essential skills for engineers, such as adaptability, problem-solving, communication, and leadership, and provided specific annotations related to documentation and planning. The session concluded with a discussion on internship opportunities, detailing the skills sought for internships in power systems, embedded systems, microcontrollers, PCB designing, and AI/ML models. Mr. Sanjo provided insights into various development boards and communication protocols used in these fields.

The interactive session allowed participants to engage directly with Mr. Sanjo, posing questions in both English and Malayalam. The Q&A session provided detailed answers and fostered a deeper connection between the speaker and the audience. The event concluded with a vote of thanks from the secretary, expressing gratitude to Mr. Sanjo for his invaluable insights and expertise. Participants were encouraged to fill out a feedback form, and the positive responses and high level of participation underscored the success of the event, paving the way for more such enlightening sessions in the future.

DEMOGRAPHICS

- **Date and Time:** October 30, 2024, 17:00 - 19:00 IST
- **Location:** Virtual (Google Meet)
- **Participants:** 25 attendees, including students and faculty members
    - IEEE members:
    - Non-IEEE members:

GLIMPSES OF THE EVENT

24. Prayana: Innobot Hackathon

Venue: St. Joseph's College of Engineering and Technology, Palai
Date: 21 and 22 September 2024

INTRODUCTION

The Innobot Hackathon 2024, part of the larger event Pranaya, was a collaborative initiative organized by the IEEE Robotics and Automation Society (RAS) Kerala Chapter and the IEEE Student Branch (SB) SJCET. The hackathon brought together talented participants from various colleges, encouraging them to develop innovative solutions to real-world challenges through robotics and automation technologies. Spanning two days, the event featured an intensive schedule of hacking sessions, presentations, and evaluations, all designed to foster creativity, teamwork, and technical problem-solving skills. This collaborative effort provided a platform for students to showcase their talents, learn from experts, and push the boundaries of technology innovation.

EVENT OBJECTIVE

- **Promote Innovation in Robotics and Automation**: To encourage students to develop creative solutions to real-world challenges using robotics and automation technologies.
- **Foster Collaboration and Teamwork**: To create an environment where participants from diverse backgrounds work together, enhancing their collaborative and communication skills.
- **Enhance Technical Proficiency**: To provide hands-on experience in coding, hardware integration, and problem-solving, helping participants improve their technical expertise in robotics and automation.
- **Encourage Real-world Application of Knowledge**: To bridge the gap between theoretical learning and practical implementation by challenging students to apply their knowledge to solve practical problems in a competitive setting.

BRIEF DESCRIPTION

Day 1: 21st September 2024

The Innobot Hackathon 2024 commenced with an interactive registration session from 11:30 AM to 11:50 AM, where participants from eight teams were welcomed:

1. Eco Experts
2. Breaking Minds
3. Muskum Pillerum
4. Akatsuki
5. Eurekabotics

6. Flow Titants
7. Delta Automations
8. Hydro Heroes

The formal inauguration ceremony took place between 11:50 AM and 12:25 PM, with key speakers from the IEEE Robotics and Automation Society (RAS) Kerala Chapter and SJCET addressing the participants and outlining the objectives of the event. Following the ceremony, participants enjoyed a well-prepared lunch break from 12:25 PM to 1:00 PM, allowing them to network and discuss their initial ideas before the hacking began.

The hackathon officially kicked off at 1:00 PM, with teams diving straight into brainstorming and development. The initial session lasted until 4:30 PM, during which participants worked on innovative solutions to various real-world problems. A brief evening snack break was provided from 4:30 PM to 4:40 PM, offering participants a chance to recharge before resuming work. The second hacking session, which ran from 4:40 PM to 7:00 PM, saw teams making significant progress in their projects. To lighten the atmosphere, an entertainment session was organized from 7:00 PM to 7:40 PM, allowing participants to unwind and relax. A hearty dinner was then served from 7:40 PM to 8:20 PM, after which teams returned to their workstations, continuing their project development through the late-night hacking session from 8:20 PM until midnight.

Day 2: 22nd September 2024

The hackathon continued overnight, with participants working tirelessly from 12:00 AM to 7:00 AM to finalize their prototypes and solutions. A breakfast break from 7:00 AM to 7:30 AM offered participants a brief respite before they returned to their projects for one last push. The final hacking session ended at 8:00 AM, and teams prepared their presentations for the evaluation phase. From 8:15 AM to 11:45 AM, teams presented their projects to a distinguished panel of judges, which included industry experts and academic leaders. The judges evaluated the projects based on criteria like creativity, technical complexity, and potential real-world application.

The valedictory ceremony and results announcement took place between 12:00 PM and 12:30 PM, where the top three teams were recognized for their outstanding performance. Team Breaking Minds from NSS College of Engineering, Palakkad claimed the 1st position, showcasing an innovative and well-executed solution, while Team Eurekabotics from Sree Chitra Thirunal College of Engineering secured the 2nd place, and Team Muskum Pillerum from Sree Chitra Thirunal College of Engineering took the 3rd position for their impressive technical efforts. The event concluded with a lunch and wind-up session from 12:30 PM to 1:00 PM, offering participants and organizers a chance to reflect on the exciting two days of collaboration, innovation, and learning.

The Innobot Hackathon 2024 was a resounding success, fostering a spirit of innovation and collaboration among participants. It provided an excellent platform for students to showcase their skills, gain valuable feedback and network with industry professionals. The event exemplified the mission of IEEE in promoting technology and engineering excellence and set a benchmark for future hackathons organized by the IEEE RAS Kerala Chapter and IEEE SB SJCET.

25. Think Green Innovation Challenge

Venue: Online
Date: 11 to 14 November 2024

The Think Green Innovation Challenge was an exclusive online ideathon organized by the IEEE SJCET Palai Student Branch in collaboration with IEEE SIGHT. Held from **November 11 to 14, 2024**, the event aimed to inspire IEEE members to conceptualize innovative and sustainable ideas addressing pressing environmental challenges. Participants were encouraged to think creatively and propose impactful solutions to promote eco-friendly practices.

The results were announced on **November 16, 2024**, recognizing the top three submissions for their originality, feasibility, and potential impact. Winners were awarded cash prizes of ₹300, ₹200, and ₹100, respectively.

26. Resume Reboot

Venue: Online
Date: 19th December 2024

INTRODUCTION

IEEE SBC CS SJCET hosted an online session titled "Resume Reboot" on 19 December 2024. The speaker for the event was Ms.Anna Thomas. The talk session was insightful with active participation of over 50 students.

EVENT OBJECTIVE

- To guide participants in creating well-structured and visually appealing resumes.
- To emphasize the importance of personal branding in career advancement.
- To share techniques for showcasing unique skills and achievements effectively.
- To provide actionable tips for improving professional visibility and network building.
- To create an interactive platform for addressing resume-related queries and challenges.

BRIEF DESCRIPTION

On December 19th, 2024, IEEE CS SBC hosted an engaging one-hour online session titled *Resume Reboot*, delivered by Anna Thomas, a distinguished educator, junior consultant at Danfoss, and entrepreneur. The session focused on key strategies for crafting impactful resumes, building a personal brand, and enhancing professional visibility. With its interactive approach, the event provided participants with actionable insights to elevate their career prospects and make a lasting impression in competitive job markets.

DEMOGRAPHICS

No of participants: 51
IEEE members: 21
Non-IEEE members: 38

GLIMPSES OF THE EVENT

27. Skill Forge: Robotics for Young Innovators

Venue: St. Joseph's College of Engineering and Technology, Palai
Date: 18 October 2024

INTRODUCTION

The *Skill Forge: Robotics for Young Innovators*, part of the larger event Pranaya, was a collaborative initiative organized by the IEEE Robotics and Automation Society (RAS) Kerala Chapter and the IEEE Student Branch (SB) SJCET. On October 18, 2024, *Skill Forge: Robotics for Young Innovators* was held at St. Joseph's College of Engineering and Technology, Palai, offering an enriching experience for school students interested in robotics and advanced technology. Organized by the IEEE Robotics and Automation Society (RAS) Kerala Chapter, this one-day workshop brought together students from various schools to engage with industry professionals and explore the latest trends in robotics. Featuring inspiring keynote speeches and interactive sessions, *Skill Forge* created a platform for young minds to transform their ideas into reality, encouraging them to think creatively about the future of technology and innovation.

EVENT OBJECTIVE

- Introduce school students to the fundamentals and latest developments in robotics and automation.
- Inspire a passion for technology and encourage innovative thinking among young participants.
- Provide students with hands-on experience in building and controlling robotic systems.
- Foster technical curiosity and empower students to explore real-world applications of robotics.
- Offer networking opportunities with industry professionals, allowing students to gain guidance and mentorship.
- Cultivate a foundation for students to pursue future studies and careers in STEM fields, particularly in robotics and automation.

BRIEF DESCRIPTION

The workshop commenced with an inauguration and an inspiring keynote address by Er. Robin Tommy, Vice Chairperson of IEEE RAS Kerala Chapter, who emphasized the potential of robotics in shaping the future and the importance of early engagement with

technology. His opening remarks set a motivational tone for the day, encouraging students to see robotics as a tool for creating positive change.

Following the keynote, Amrita Jiju, a Student Representative of IEEE RAS Kerala Chapter, and Rizwan M Shiras, ECC of IEEE RAS Kerala Chapter, led morning sessions focused on the fundamentals of robotics. These sessions provided insights into the core concepts of automation and introduced students to the critical skills needed for building and controlling robotic systems.

After a lunch break, the event shifted to a hands-on workshop led by Amrita and Rizwan, where students had the opportunity to put their learning into practice. In a collaborative environment, participants engaged in guided activities that enabled them to design and operate basic robotic mechanisms, gaining practical experience and understanding the real-world applications of their skills.

The workshop concluded with a reflection on the day's activities and words of encouragement for students to continue exploring robotics and technology. Overall, *Skill Forge* proved to be an invaluable experience, inspiring young participants to envision themselves as future innovators in the field of robotics and technology.

28. "Women Of Wisdom (WOW 5.0) - Tech-Talk Series; Talk #8."

INTRODUCTION

Women of Wisdom (WOW) 5.0, a flagship initiative of IEEE PES Kerala Chapter, hosted its eighth session on 15 December 2024. The event was organized in collaboration with IEEE Women in Power Kerala, IEEE R10 PES Women in Power, IEEE Women in Engineering Affinity Group Kerala Section, and IEEE PES SBC SJCET. The session was anchored by the National Institute of Solar Energy (NISE).

The webinar, titled "Solar Water Pumps and Transition to Sustainability," featured Ms. Richa Parmar, Deputy Director Technical at NISE.

EVENT OBJECTIVE

- **Educate** participants on the key components, functionality, and benefits of solar water pumping systems.
- **Highlight** the role of solar water pumping technology in achieving sustainable water management and agricultural practices.
- **Discuss** the environmental and economic advantages of integrating solar water pumps in various applications, including irrigation, community water supply, and drinking water.
- **Emphasize** the alignment of solar water pumping system development with the United Nations Sustainable Development Goals (SDGs), particularly those focused on climate action and sustainable agriculture.
- **Foster** an interactive learning environment through a lively Q&A session, allowing participants to engage directly with the expert speaker, Ms. Richa Parmar, and deepen their understanding of the future of solar water pumping technology.
- **Inspire** attendees to explore innovative solutions and technologies that contribute to sustainable development and environmental conservation.

BRIEF DESCRIPTION

The eighth session of Women of Wisdom (WOW) 5.0, hosted by the National Institute of Solar Energy (NISE), was held on 15 December 2024. This engaging virtual event was organized by the IEEE PES Kerala Chapter, in collaboration with IEEE Women in Power Kerala, IEEE R10 PES Women in Power, IEEE Women in Engineering Affinity Group Kerala Section, and IEEE

PES SBC SJCET. The session aimed to shed light on the role of solar water pumping systems in achieving sustainable development.

The session was led by Ms. Richa Parmar, who provided an in-depth exploration of the key components and benefits of solar water pumping systems. She explained the functionality and integration of these systems, highlighting their applications in irrigation, community water supply, and drinking water. The presentation also covered technical specifications, advantages, and maintenance guidelines for solar water pumping systems.

Ms. Parmar emphasized the importance of these systems in achieving sustainable water management by minimizing environmental impact while meeting modern agricultural needs. She discussed the role of these technologies in addressing global environmental concerns and contributing to cleaner, more efficient water usage.

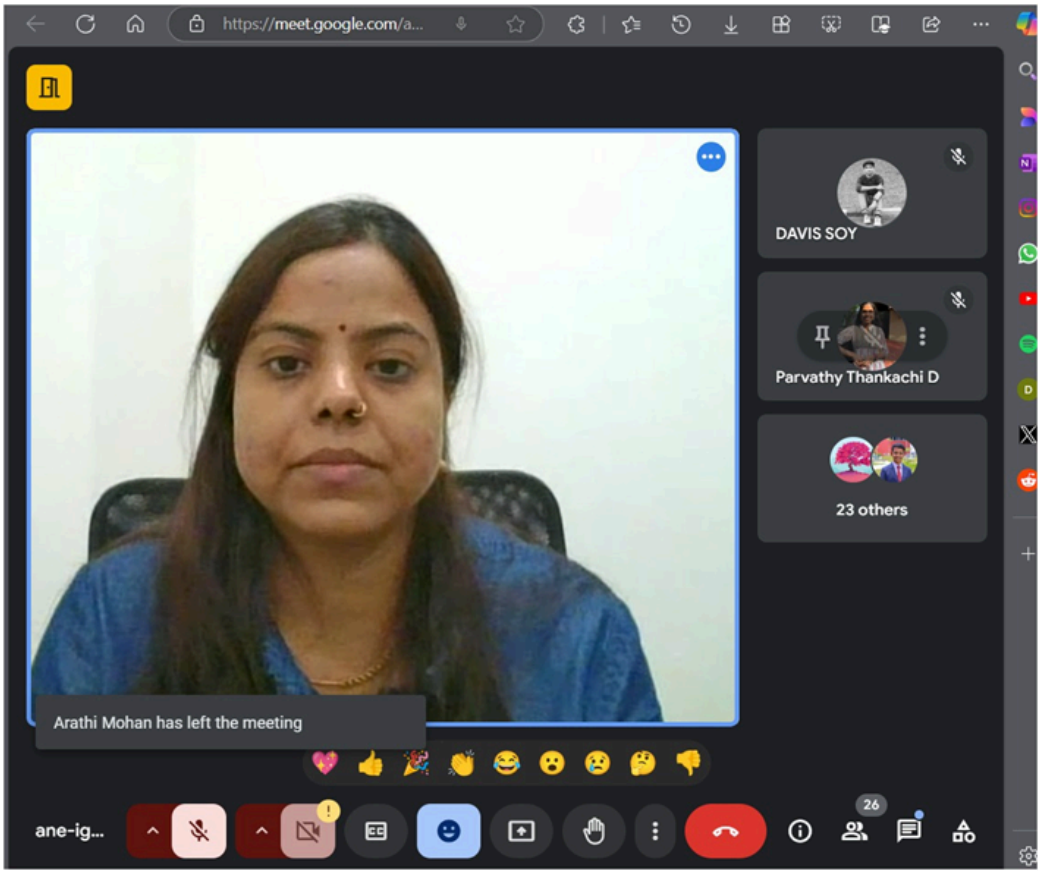
In addition to the technical insights, the session highlighted the alignment of solar water pumping system development with the United Nations Sustainable Development Goals (SDGs), particularly those focused on climate action and sustainable agriculture. The talk concluded with a lively Q&A session where participants had the opportunity to engage directly with the speaker and deepen their understanding of the future of solar water pumping technology.

This session not only provided valuable knowledge about solar water pumping systems but also sparked important conversations on the role of innovation in creating sustainable water management solutions.

DEMOGRAPHICS

- **Date and Time:** 15 December 2024, 7:30 PM - 8:30 PM IST
- **Location:** Virtual (Google Meet)
- **Primary Host Institution:** National Institute of Solar Energy (NISE)
- **Participants:** 25 attendees, including students and faculty members
    - IEEE members: 7
    - Non-IEEE members: 35

GLIMPSES OF THE EVENT


https://meet.google.com/a...
DAVIS SOY
Parvathy Thankachi D
23 others
Arathi Mohan has left the meeting
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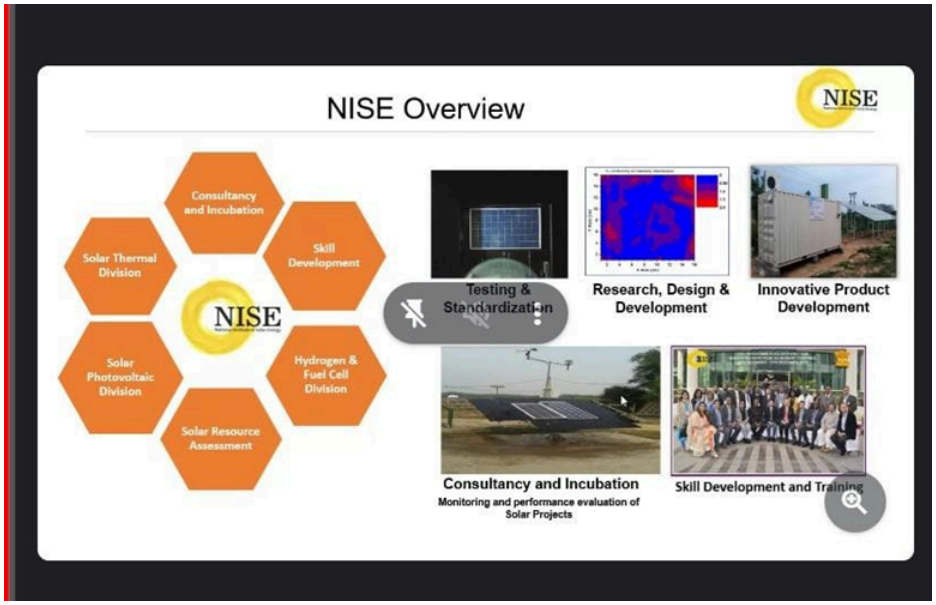
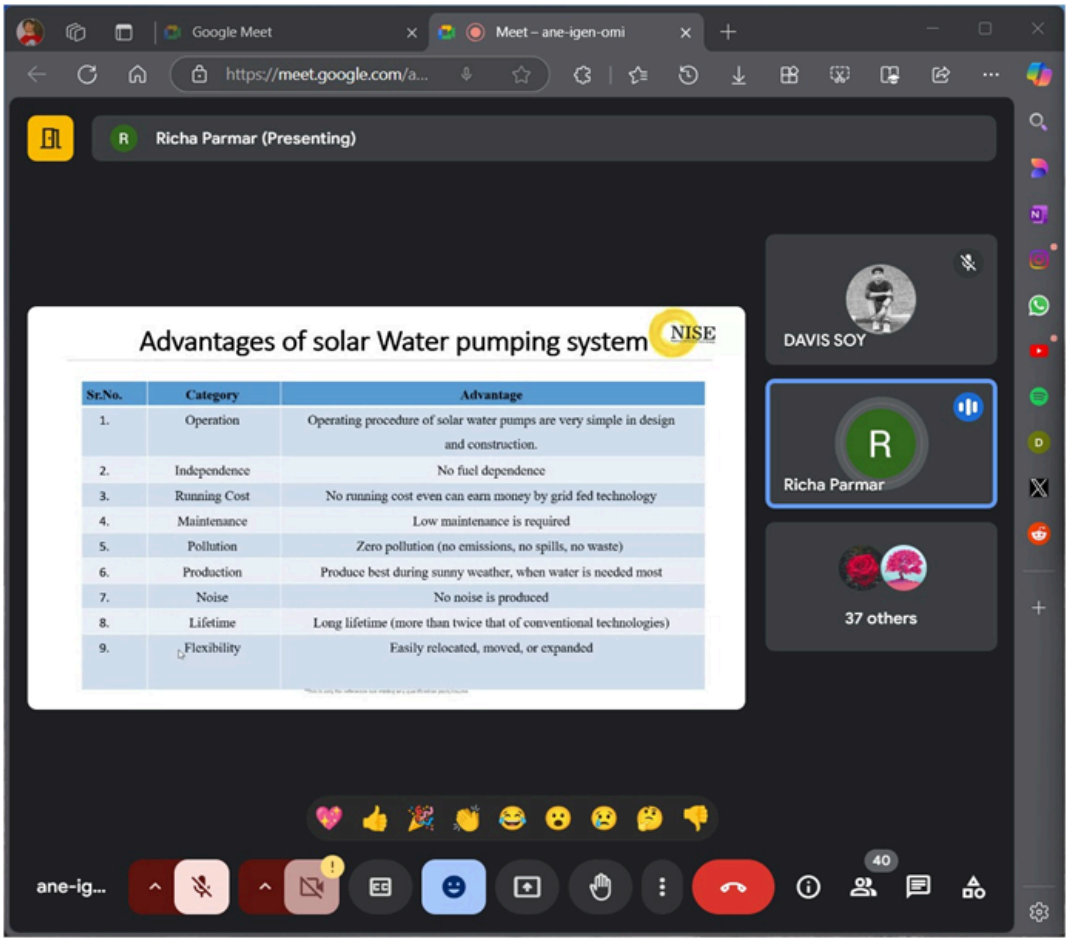
26


NISE Overview
NISE
Consultancy and Incubation
Skill Development
Solar Thermal Division
Solar Photovoltaic Division
Hydrogen & Fuel Cell Division
Solar Resource Assessment
Testing & Standardization
Research, Design & Development
Innovative Product Development
Consultancy and Incubation
Monitoring and performance evaluation of Solar Projects
Skill Development and Training



Sr.No.	Category	Advantage
1.	Operation	Operating procedure of solar water pumps are very simple in design and construction.
2.	Independence	No fuel dependence
3.	Running Cost	No running cost even can earn money by grid fed technology
4.	Maintenance	Low maintenance is required
5.	Pollution	Zero pollution (no emissions, no spills, no waste)
6.	Production	Produce best during sunny weather, when water is needed most
7.	Noise	No noise is produced
8.	Lifetime	Long lifetime (more than twice that of conventional technologies)
9.	Flexibility	Easily relocated, moved, or expanded

IEEE DAY EVENTS in OCTOBER 2024

29. IEEE Day Event 1: Session on Node.JS

Venue: Google Meet
Date: 5th October 2024
Time: 7pm - 9pm

As part of the IEEE Day 2024 celebrations, the IEEE Student Branch of SJCET organized a series of seven insightful technical events and competitions, aimed at fostering knowledge sharing and skill development among students. The first session in this series was a virtual session on **Node.js**, conducted on **October 5th, 2024**.

Agenda:

Introduce participants to the core concepts of Node.js and its application in backend development.

- Equip attendees with practical skills to develop scalable web applications.
- Foster a deeper understanding of server-side JavaScript programming.
- Encourage IEEE and non-IEEE members to enhance their technical expertise in modern web technologies.

The Node.js session, led by Alen P. Aji, Web lead IEEE SB SJCET and Intern at IEEE Kerala Section provided a comprehensive introduction to backend development using Node.js. The session began with an overview of JavaScript's role in modern web development and transitioned into setting up a Node.js environment. Alen guided participants through creating a basic server using Node.js, explaining how to handle HTTP requests and responses.

The session also covered the use of Express.js, a popular web application framework for Node.js, showing how to build RESTful APIs efficiently. Alen demonstrated key concepts through live coding examples, illustrating how to route requests, manage data with middleware, and integrate databases. Throughout the session, participants were encouraged to ask questions, making it an interactive learning experience.

By the end, attendees gained practical skills in developing dynamic, server-side applications, with the knowledge to continue exploring Node.js in their own projects. Alen's engaging approach allowed participants to grasp complex concepts and apply them in practical scenarios, enhancing their backend development skills.

30. IEEE Day Event 2: TypeBlaze Typing Speed Challenge

Venue: St. Joseph's College of Engineering and Technology, Palai
Date: 7th October 2024
Time: 4.30pm - 5.30pm

The TypeBlaze Typing Speed Challenge was conducted as part of the Day Two celebrations for IEEE Day at St. Joseph's College of Engineering and Technology, Palai. It was one of the seven events organized to enhance student skills and participation. The event took place from 4:30 PM to 5:30 PM on 7th October , with 28 students competing, including 10 IEEE members and 18 non-IEEE members.

The TypeBlaze Typing Speed Challenge was a dynamic event held as part of the IEEE Day celebrations at St. Joseph's College of Engineering and Technology, Palai. Organized on Day Two of the seven-event series, this challenge tested the typing speed and accuracy of participants. A total of 28 students took part, with 10 IEEE members and 18 non-IEEE members competing in an exciting and fast-paced environment.

The challenge required participants to type a pre-determined passage within a set time limit, with their typing speed measured in words per minute (WPM). Accuracy was just as important as speed, as errors led to penalties, making it essential for participants to balance quick typing with careful precision.

After an intense competition, Abel Bin, a 2nd-year student from the AD Department, emerged victorious, securing the first prize of ₹300. Felix Jobi, a 3rd-year student from the CS Department, was awarded the second prize of ₹200. The cash prizes were handed over by the Director of the college, adding an extra level of recognition to the winners' achievements.

The event was not only a fun and competitive experience but also served as a valuable platform for students to hone a critical skill in the digital age. As part of the IEEE Day celebrations, it furthered the objective of enhancing technical and practical skills while fostering a spirit of camaraderie among participants.

Demographics:

No of Participants: 28

IEEE Members: 10

Non-IEEE Members: 18

31. IEEE Day Event 3: IDEAXPRESS: Idea Pitching Competition

Venue: Online Submission
Deadline: 9th October 2024

As part of the IEEE Day 2024 celebrations, a series of seven events were conducted to promote innovation and technological advancement. IdeaXpress - Idea Pitching Competition was the 3rd event in this series, focusing on the theme Leveraging Technology for a Better Tomorrow. The competition aimed to inspire participants to present innovative, technology-driven solutions addressing real-world challenges. The event was a success with a total participation of 20.

Submissions were collected through Google Forms, with the last date for entries set for October 9, 2024. The event featured a prize pool of ₹500, with ₹300 awarded to the first-place winner and ₹200 to the second-place winner.

Demographics:

No of Participants: 20

32. IEEE Day Event 4: SimuTech Arena - Online Simulation Competition

Venue: Online Submission
Deadline: 9th October 2024

As part of IEEE Day 2024, *SimuTech Arena* was the 4th event in a series of seven activities aimed at promoting technological learning and innovation. The event focused on online simulation, where participants were required to upload screen recordings of Arduino project simulations they had created using Tinkercad software.

The event provided an opportunity for participants to demonstrate their technical proficiency and creativity in circuit design, offering them practical experience in simulation-based learning. Submissions were collected through an online platform, with a deadline of October 9, 2024.

The competition attracted 19 participants, who showcased a variety of projects, demonstrating their knowledge of Arduino and digital simulation. The best submissions were awarded cash prizes, with ₹300 for the 1st place winner and ₹200 for the 2nd place.

Demographics:

No of Participants: 19

33. IEEE Day Event 5: Webinar on Smart Design with Generative AI

Venue: Google Meet
Date: 9th October 2024
Time: 7.00pm - 9.00pm

The 5th event of the IEEE Day 2024 celebration series was a highly insightful and engaging webinar on *Smart Design with Generative AI*. Held on October 9, 2024, from 7:00 PM to 9:00 PM, the webinar attracted an impressive 122 participants, reflecting the growing interest in artificial intelligence (AI) and its revolutionary potential in modern design practices.

Key Focus: The webinar delved into the rapidly evolving world of Generative AI, an innovative subset of artificial intelligence that uses algorithms to generate complex designs based on input parameters. The session aimed to familiarize attendees with the concept of AI-assisted design processes, where machine learning models can suggest optimized designs, accelerate creativity, and solve complex design challenges.

Topics Covered: The session began with an introduction to the fundamentals of Generative AI, explaining how it is transforming traditional design methodologies. Participants were introduced to various AI tools used in design, such as Autodesk's Fusion 360 and generative adversarial networks (GANs), which enable designers to explore multiple iterations of a design concept rapidly. Real-world applications were discussed, demonstrating how AI is already making strides in architecture, automotive engineering, fashion, and product development.

The webinar highlighted the significant benefits of using AI in design, including the ability to:

- Optimize design performance and functionality.
- Minimize resource consumption.
- Explore a vast number of design alternatives in a fraction of the time.
- Overcome complex design challenges that human designers alone might struggle with.

Interactive Session: An interactive Q&A session followed the main presentation, allowing participants to ask questions directly to the speaker, further clarifying concepts and exploring how AI can be integrated into their own projects and workflows. Attendees were also provided with access to resources and tools to continue their learning journey post-webinar.

Demographics:

No of Participants: 122

34. IEEE Day Event 6: King's Gambit: Online Chess Competition

Venue: St. Joseph's College of Engineering and Technology, Palai
Date: 10th October 2024
Time: 7.30pm - 9.30pm

As part of the IEEE Day 2024 celebrations, *King's Gambit - Online Chess Competition* was the 6th event in a series of seven activities focused on intellectual engagement and strategic learning. The event featured a competitive chess tournament conducted online, aimed at developing cognitive and decision-making skills among participants.

Initial Quiz Phase: To ensure a high level of competition, a preliminary chess quiz was held on October 9, 2024, via Google Forms. A total of 48 participants applied for the event, and based on the quiz results, the top 8 participants were shortlisted for the main competition. The quiz tested participants' knowledge of chess theory, strategy, and history, ensuring that those with a strong foundation in chess advanced to the next stage.

Main Competition: The main event followed a 3-round 1-on-1 competition format, where participants faced off in knockout-style matches. Each player competed head-to-head, advancing through each round based on their performance in timed matches. The 1-on-1 format allowed for an intense, focused competition, where players had to think strategically and act quickly to outmaneuver their opponents.

The matches were intensely competitive, with each player aiming to outwit their opponent while maintaining the core principles of fair play and sportsmanship. The finalists battled it out for the top prizes, with the 1st place winner receiving ₹300 and the 2nd place winner ₹200, part of a total prize pool of ₹500. The event not only encouraged participants to test their chess skills but also promoted critical thinking and mental agility in a dynamic, competitive environment.

Demographics:

No of Participants: 48

35. IEEE Day Event 7: King's Gambit: Online Chess Competition

Venue: Online, Mentimeter
Date: 11th October 2024
Time: 7.00pm - 8.00pm

As part of the IEEE Day 2024 celebrations, *Logic Fusion Rush - Logic IQ Competition* was the 7th and final event in a series of seven activities designed to engage students in intellectual and strategic challenges. Held on October 11, 2024, from 7:00 PM to 8:00 PM, the event tested participants' logical thinking and IQ skills through the Mentimeter platform.

Participants were challenged with a variety of logic puzzles, brain teasers, and IQ questions, designed to push their cognitive boundaries. The use of Mentimeter allowed for real-time responses, creating a dynamic and fast-paced environment where participants had to think on their feet. The competition encouraged participants to showcase their problem-solving abilities while fostering a sense of friendly competition.

The event saw high engagement, with participants battling it out for the top positions. The prize pool of ₹500 was awarded among the winners, with the top performers demonstrating superior logical reasoning and quick thinking.

The *Logic Fusion Rush - Logic IQ Competition* was the grand finale of the IEEE Day 2024 celebrations, marking the end of a series of seven intellectually engaging events. This event provided participants with an opportunity to test and showcase their logical reasoning and problem-solving abilities in a fun and competitive environment. The use of Mentimeter added a real-time, interactive element to the competition, ensuring that the final event of the series was both exciting and challenging. With high levels of participation and enthusiasm, the event successfully concluded the IEEE Day 2024 series, leaving participants with a sense of accomplishment and intellectual satisfaction.

36. Technista'25: Pixel Perfect

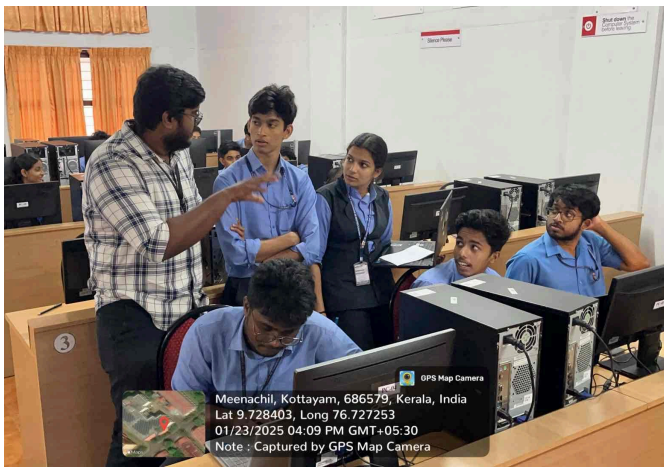
Venue: Computer Lab, St. Joseph's College of Engineering and Technology, Palai
Date: 23rd January 2025
Time: 2.30pm - 4.30pm

As part of Technista'25, IEEE SB conducted a Figma workshop in the college's computer lab. The session was conducted by Mr. Aswin Jeev Johny, RP2, iDatalytics. The session was overall a great experience for the students to learn the basics of Figma and network with an expert in the field of design.

Over the course of 2 hours, Mr Aswin covered the basics of Figma, starting from frame creation and then shape manipulation. Then, he shared how students can use plugins available to use other tools that are not natively available on Figma.

Moving on, the speaker walked the participants through the steps to create a basic shape in Figma and give it colour, use a picture mask, play with orientations and shadows. The students, mostly from non-design backgrounds, created beautiful pieces of art and creativity to show as proof of their work during the duration of the workshop.

Demographics:
No of Participants: 28
IEEE Members: 10
Non-IEEE Members: 18



37. Technista'25: Tech Threads

Venue: Google Meet
Date: 23rd January 2025
Time: 8.30pm - 9.45pm

As part of Technista'25, IEEE SB SJCET conducted a LinkedIn session to bring the capabilities of LinkedIn to the attention of students. The speaker was Mr. Blesson Karikulammalayil Tomy, ECC, IEEE ComSoc Kerala Chapter, Secretary, IEEE SB SJCET and Ex-LinkedIn Top Voice on Computer Science and Strategy.

Throughout the event, Mr. Blesson talked about the importance of using LinkedIn using a memorable example, relating linkedIn profiles to the movies done by popular Indian Actors. This example set the tone for the rest of the event, where he demonstrated the importance of LinkedIn profiles using real life examples. He spent only a little time on theory and powerpoint presentation, the vast majority of time was spent scrolling through LinkedIn, looking at interesting profiles. He highlighted the importance of regular posting, highlighting achievements and connecting with industry leaders.

He especially took great care to go through the most important sections in a profile and enumerated each one of them to ensure that the participants remember.

Demographics:

No of Participants: 35
IEEE Members: 12
Non-IEEE Members: 23

38. Technista'25: Market Based Opportunities towards Youth Opportunities

Mr. Dennis Joseph, a Legal Consultant shared his views on how students can utilise the current market scenarios to create a good career opportunity. Throughout the session, Mr. Joseph engaged the audience with interesting scenarios and examples, keeping them engaged and interested. The students were able to learn how they can reach their full potential in another market that is outside of what they are learning now.

The speaker shared his views about youth opportunities with public government services such as diplomatic services and what kind of people they are looking for. He also shared about opportunities for students to work with universities and foundations where students can actively look for roles that they would like to work in.

He also presented books to some of the students present in the session.

Demographics:
No of Participants: 25
IEEE Members: 10
Non-IEEE Members: 15

39. Technista'25: Git It Right: Code.Commit.Collaborate

Mr. Mrudul John Mathews conducted an online workshop on Git and Github. Initially beginning with theory, he took the time to explain what GitHub is used for and how GitHub uses Git as a platform for version control. He taught about the basics of connecting to GitHub using VS Code and making an initial commit. He then talked about forking, cloning repositories and initiating pull requests.

With his deep understanding of Version Control, he taught students how to best combine the theory and practice using his personal experiences. He was able to resonate well with the students given that he just graduated from college. He also took the time to patiently answer questions and clear any misconceptions that the students may have had. He maximised the time that he had and made the best out of the online environment.

Many students had also commented that they would have preferred this session offline as it would have been easier for them to follow along with the speakers screen.

Demographics:
No of Participants: 25
IEEE Members: 10
Non-IEEE Members: 15

40. 5-Day Bootcamp on Allied Technologies for Drone/UAS

Date: February 10-14, 2025

Venue: St. Joseph's College of Engineering and Technology, Palai

INTRODUCTION

A comprehensive 5-day bootcamp focused on Allied Technologies for Drone/UAS, organized by IEEE SB SJCET in association with the National Institute of Electronics and Information Technology Calicut (NIELIT Calicut), under the Ministry of Electronics and Information Technology (MeitY).

EVENT OBJECTIVE

- Provide hands-on training in drone and unmanned aerial systems technologies
- Equip participants with practical knowledge of the latest advancements in drone technology
- Build capacity for human resource development in Unmanned Aircraft Systems
- Foster innovation and understanding of drone applications and related technologies
- Create networking opportunities with experts in the field of drone technology

BRIEF DESCRIPTION

The boot camp was organized through a collaboration between multiple organizations including IEEE Kerala Section, IEEE RAS Kerala Chapter, Kerala Knowledge Economy Mission, and Kerala Start-up Mission. The program was fully funded by the Ministry of Electronics and Information Technology, Government of India under the project "Capacity Building for Human Resource Development in Unmanned Aircraft System (Drone and related technology)."

The 5-day intensive workshop featured comprehensive sessions covering drone fundamentals, design principles, flight mechanics, control systems, and practical applications. Participants engaged in hands-on activities including drone assembly, programming, and flight operations. Industry experts and academics provided insights into emerging trends, regulatory frameworks, and future career opportunities in the drone technology sector.

The bootcamp offered participants an immersive learning environment with access to cutting-edge equipment and technologies, fostering innovation and practical skill development. The program concluded with a demonstration of participant projects and distribution of certificates acknowledging their newly acquired expertise in drone technology.

DEMOGRAPHICS
No of Participants: 90
No of IEEE Members: 50
No of Guests:40


MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
रा.इ.सू.प्रौ.सं NIELIT
ST JOSEPH'S
IEEE STUDENT BRANCH SJCET PALAI
IEEE
Boot Camp:
ALLIED TECHNOLOGIES FOR DRONE/UAS
10th - 14th February 2025 , SJCET,PALAI
IEEE Kerala Section
IEEE Robotics & Automation Society
KERALA KNOWLEDGE ECONOMY MISSION
KSUM STARTUP MISSION
INNOVATION AND ENTREPRENEURSHIP DEVELOPMENT CENTRE
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GPS Map Camera
Choondacherry, Kerala, India
Ppgg+vm6, Choondacherry, Kerala 686579, India
Lat 9.727128° Long 76.726564°
13/02/2025 10:08 AM GMT +05:30
Google


41. ART-AI-THON

Venue: Online
Date: 31th January 2025

INTRODUCTION

"ART-AI-THON" was an AI-powered poster generation competition organized by the **Computer Society of IEEE SB SJCET** as part of **Engineers' Week 2025**. The event provided a platform for participants to explore AI-driven creativity and showcase their artistic skills using advanced image generation tools.

EVENT OBJECTIVE

- Encourage creativity
- Promote AI awareness
- Enhance technical skills
- Foster innovation

BRIEF DESCRIPTION

The Computer Society of IEEE SB SJCET successfully organized **"ART-AI-THON,"** an AI-powered poster generation competition as part of the **Engineers' Week** celebrations. Held from **January 31 to February 3, 2025,** this event provided a unique opportunity for participants to explore the intersection of **art and artificial intelligence.** Participants were encouraged to experiment with AI-based image generation tools to create visually stunning and innovative posters. The competition aimed to **foster creativity, technological curiosity, and awareness of AI's role in digital art.** With a futuristic theme and an engaging format, ART-AI-THON attracted students and AI enthusiasts eager to push the boundaries of **machine-generated creativity.**

DEMOGRAPHICS

No of participants: 11
IEEE members: 6
Non-IEEE members: 5

GLIMPSES OF THE EVENT

42. TESSERACT 8.0

Venue: St. Joseph's College of Engineering and Technology, Palai
Date: 29th and 30th March 2025

INTRODUCTION

TESSERACT 8.0 is the flagship event of IEEE SB SJCET and it was conducted

EVENT OBJECTIVE

- Encourage creativity
- Promote AI awareness
- Enhance technical skills
- Foster innovation

BRIEF DESCRIPTION

Tesseract is no less than a celebration for the IEEE SB SJCET since it's our annual flagship event. Tesseract provides an avenue for all the minds out there to meet, network, and find new opportunities. Enjoy these two days with fun workshops, a cultural night, and, of course, the food fiesta.

This year there were 3 technical workshops that ran together. These workshops featured distinguished speakers from all over India who came to St. Joseph's College of Engineering and technology just to interact and teach the students in the college. Apart from this, TESSERACT 8.0 also featured a management session conducted by Mr. Babusankar S who taught the students the importance of teamwork and commitment through various hands-on activities.

We also had an external guest, Mr. Shelvin James who graced us with his presence. He is currently a content creator and used to be a Radio Jockey in one of Kerala's prominent Radio Stations. He emphasised to the participants the importance of seizing opportunities and learning from each attempt.

As part of IEEE Membership Development, We also had the opportunity to invite some of IEEE seniors from IEEE Kerala Section to take a Membership Development Session for the participants. They highlighted the importance of IEEE and the various methods by which we can make use of the grants, funding and other opportunities offered to its members.

Our workshops included:

1) Penetration Testing - Mr. Abhijith A

2) Data Analytics - Mr. Sanu K Joseph (MCA Graduate)

3) Power Electronics & Motor Control Workshop - Dr. Antony K Peter (Postdoctoral Researcher, Power Electronics)

Tesseract also included multiple non technical programs to encourage students to step out of their comfort zone and work together to solve challenges.

DEMOGRAPHICS
No of participants: 48
IEEE members: 15
Non-IEEE members: 33

GLIMPSES OF THE EVENT