



**3.2.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year 2023 - 2024**

**IEEE Student Branch - 16621 Activities**

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*Dany*  
11/6/24  
**Coordinator**

*S. Praveen*  
11/6/2024  
**SB Counsellor / Principal**  
**Principal**  
Kings College of Engineering  
(Autonomous)  
Prinalkulam - 613 303

## JULY 2023

1. Student Branch meeting for the academic year 2023 – 2024 (odd semester) was held on 31.07.2023. Dr. J. Arputha Vijaya Selvi, SB Counsellor presided over the meeting. After a brief discussion, the following members were nominated as office bearers: Chair: Mr. Ranjith M; Treasurer: Ms. Swathi V; Vice Chair: Ms. Nithyashri B.M.; Webmaster: Mr. Muruganantham P and Secretary: Ms. Abikayil Aarthi S.

## AUGUST 2023

1. IEEE STB 16621 in association with KINGS Project Center organized an Awareness Programme for School Students on Robotics on 18.08.2023 at Swami Dayanandha Nursery & Primary School, Thanjavur. The training mainly focused on encouraging school students in the field of robotics and automation. The students were introduced to different types of robots and their applications. The club members taught the students about the different parts and equipment's required to develop robots. The highlight of the programme was the hands-on training session, where students worked in small groups to assemble simple electronics projects. Step-by-step instructions were provided, allowing participants to construct their electronics project and gain insight into electronics and mechanical engineering principles. This workshop was coordinated by Dr. P. Narasimman, AP/EEE, Mr. R. Sathyaraj, AP/ECE and Mr. P.Jaya Prasad, Student Volunteer, STB 16621.



2. National Level Training Programme on Innovative Project Development Using IoT

National Level Training Programme on “Innovative Project Development using IoT” was organized on 21st August 2023 & 22nd August 2023. Ms.U.Jeyamalar, AP/ECE welcomed the gathering and introduced the resource persons. Mrs.N.Mangaiyarkarasi, HOD/ECE delivered the Inaugural address. In her speech, she motivated the students towards innovation and how the trainings help students to implement their ideas. **During session 1**, Ms.H.Hajitha Banu, Embedded Specialist, Jadayu Enterprises presented a brief technical note on the fundamentals of embedded system, features of Microprocessors, Microcontrollers and interfacing devices. She demonstrated how arduino development platform is used for a typical embedded application. **During the session 2**, she gave a complete description about the arduino pin configuration,

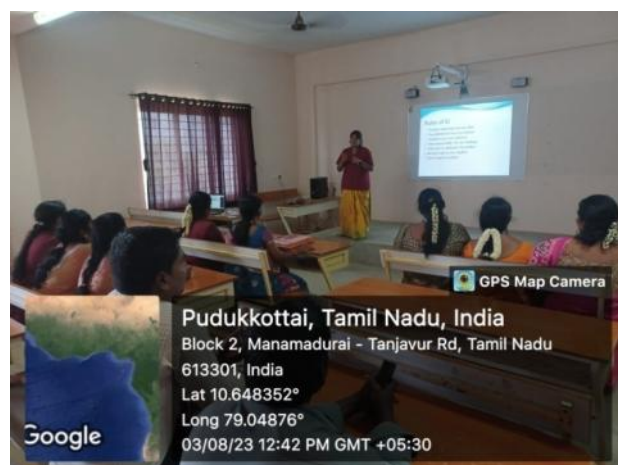
architecture and interfacing methods. She explained various blocks in the arduino development kit, she also demonstrated the students about Embedded C Programming using Arduino IDE.

**During session 3**, Mr.T.Jeyaseelan, AP /ECE, demonstrated the students with LCD interfacing and also trained the students, how to read temperature and humidity data from DHT11 sensor and display the sensor data's in the LCD display. **During session 4**, Dr.P.Narasasimman, AP /EEE, delivered about the wireless connectivity interface for arduino. He explained the pin details of ESP8266 and the specifications of wi-fi module. During this session he created a small android based application and demonstrated the on and off control of LED and motor. Finally he outlined typical project ideas and explained the methods for implementing these ideas. Students queries were addressed during the interactive sessions. Mr.R.Thandayuthapani, AP/ECE, delivered Vote of Thanks. Certificates were distributed by Mrs.N.Mangaiyarkarasi, HoD/ECE. Totally 39 external participants have enthusiastically participated in this workshop.



### 3. Seminar on Emotional Intelligence

Department of CSE in association with IEEE STB 16621 organized a seminar on Emotional Intelligence on 03.08.2023. Ms.N.Dhamayandhi and Ms.B.Bavithra explained the basics of Emotional Intelligence, factors that affect the human mind. They have described about DISC assessment tool which analyzes the behavior of a person. A DiSC assessment also measures the values of a person's prioritize. The results explain the percentage of each style of a person are and what that means for how the person handle challenges, interact with others, approach life and how others perceive that person.



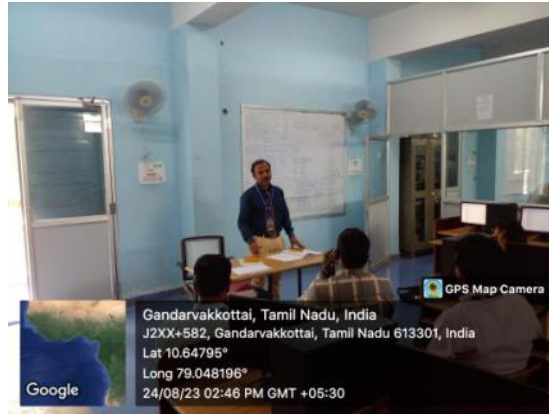
4. Seminar on A fault tolerance and an optimal relay node selection algorithm for WSN using modified PSO

Department of CSE in association with IEEE STB 16621 organized a seminar on fault tolerance and an optimal relay node selection algorithm for WSN using modified PSO on 22.08.2023. Ms. K. Abinaya, AP/ CSE delivered lecture. She explained the concepts of Wireless Sensor Networks, need of fault tolerance in WSN and discussed various algorithms to achieve the fault tolerance.



5. Internal Staff Seminar on Design Automation for Embedded Systems

Department of ECE in association with IEEE STB 16621 organized a seminar on Design Automation for Embedded Systems on 24.08.2023. Mr. T. Jeyaseelan, AP/ ECE delivered lecture.



6. Webinar on Tips and Tricks to Succeed in Hackathon

Multimedia Club, Department of CSE in association with IEEE STB 16621 organized a webinar on Tips and Tricks to Succeed in Hackathon on 26<sup>th</sup> August 2023. Ms. K. Amirtha Lakshmi, System Engineer, TCS, Chennai and Ms. V. Mathumitha, Software Engineer, CEI, Chennai delivered lectures. During the session, they shared their experiences how they won in the hackathon. At the end of the session, students gained awareness about identifying and prototyping Smart India Hackathon problem statements A total of 56 students from CSE, ECE and EEE participated in the event.

**KINGS**  
COLLEGE OF ENGINEERING  
Approved by AICTE, New Delhi & Affiliated to Anna University Chennai  
NAAC B++ Accredited Institution  
Recognized Under 2(f) & 12 (B) of UGC

SMART INDIA HACKATHON

23 Years of Academic Excellence  
SEEK\*STRIVE\*SUCCEED

IEEE  
Madras Section  
STB 16621

**Webinar on**  
**Tips and Tricks to get succeed in Hackathon**

Organized by  
**Department of Computer Science and Engineering**  
in association with  
**Multimedia Club**

**Resource Person**  
K. Amirtha Lakshmi,  
System Engineer,  
TCS, Chennai.

**Resource Person**  
V. Mathumitha,  
Software Engineer,  
CEI, Chennai.

Date: 26-08-2023  
Time: 1:10pm-4:00pm

Punalkulam, Near Thanjavur.  
[www.kingsengg.edu.in](http://www.kingsengg.edu.in)

## 7. Technical Quiz Series - Control Systems - 01

Department of EEE in association with IEEE STB 16621 organized a Technical Quiz on Control Systems on 26<sup>th</sup> August 2023. 30 Students participated in the Programme and was coordinated by Dr. P. Narasimman, AP/EEE.

### 1. Engineers' Day Celebration - Technical Quiz

Research & Development Section in association with IEEE STB 16621 jointly organized Technical Quiz on 12.09.2023. Three rounds were conducted and 231 students participated in the event. Mr. Praveen kumar, IV EEE and Mr. Veerakumar, III Mech bagged the First Prize, Mr. Thirumurugan, IV CSE and Mr. Murugaraj, IV CSE bagged Second Prize. The event was coordinated by Ms. Abikayil Aarthi S, AP/CSE.



### 2. Engineers' Day Celebration - Circuit Making

Research & Development Section in association with IEEE STB 16621 jointly organized Circuit Making on 12.09.2023. 23 students participated in the event. Mr. A.Yuvaraj, III EEE won First Prize, Mr. S.Sathish, IV EEE won Second Prize. The event was coordinated by Dr. Narasimman P, AP/EEE.



### 3. Engineers' Day Celebration - Code Debugging

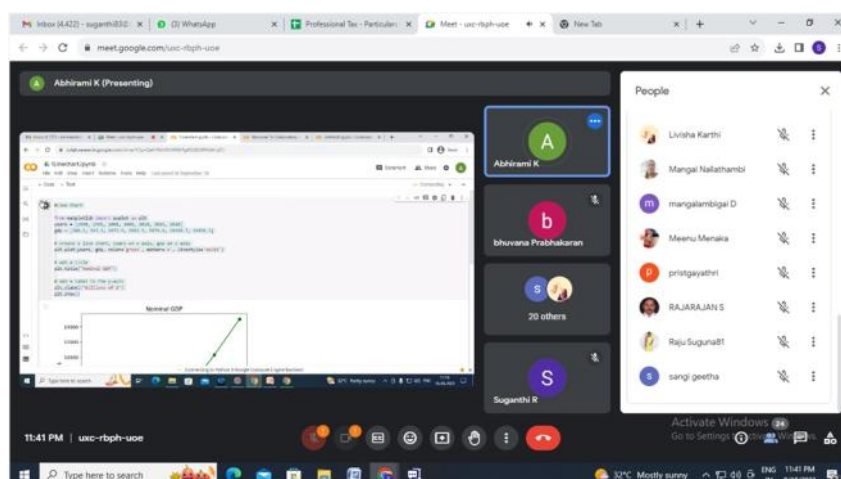
Research & Development Section in association with IEEE STB 16621 jointly organized Code Debugging on 12.09.2023. 112 students participated in the event. Mr.Kumaresan.K.P and Mr. Manoj. M, of III CSE won First Prize, Ms. Roohi Shifa.M and Ms. Shalini.K, of III CSE won Second Prize. The event was coordinated by Dr. Pasupathi T, AP/ECE.





#### 4. FDP on Microsoft Power BI , Anaconda Tools and IBM Congos Analytics for Business Analytics and Data Science

Department of Computer Science and Engineering in association with IEEE STB 16621 organized an five days FDP on Microsoft Power BI , Anaconda Tools and IBM Congos Analytics for Business Analytics and Data Science from 19.09.2023 - 23.09.2023. On 19.09.2023, session-1 was handled by Dr.K.Abhirami, Assoc. Prof/CSE on the topic Introduction to Data Science & Business Analytics and session-2 was handled by Ms.S.Abikayil Aarathi, AP/ CSE on the topic Microsoft Power BI Data Fundamentals. On 20.09.2023 and 21.09.2023, session-1&2 were handled by Ms.P.Kaviya, AP/IT Kamaraj College of Engineering & Technology, Virudhunagar on the topic IBM Congos Analytics Tool. On 22.09.2023, Hands on session on Anaconda Navigator was handled by Mr.S.Rajarajan, AP/CSE and Hands on session on Hands on Session Microsoft Power BI Tool was handled by Ms.S.Abikayil Aarathi , AP/ CSE Ms.N.Dhamayandhi , AP/CSE. On 23.09.2023, in the forenoon, a Hands-on-session on Microsoft Power BI Tool was handled by Dr.K.Abhirami and Ms.R.Sugantha Lakshmi, AP/CSE. During the afternoon session, Ms.S.Puvaneswari, AP/CSE and Ms.R.Sugantha Lakshmi, AP/CSE handled the session with case study. The programme was coordinated by Ms.S.Puvaneswari, AP/CSE Ms.R.Sugantha Lakshmi, AP/CSE. Xx participated and 36 participants got benefitted.



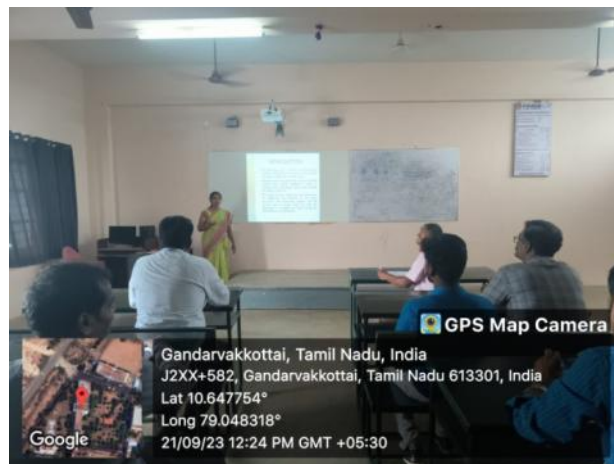
## 5. Orientation Programme on Arduino Programming

Department of Electronics and Communication Engineering in association with IEEE STB 16621 organized an orientation Programme on Arduino Programming on 20.09.2023. Mr. T. Jayaseelan, AP/ECE delivered lecture. 40 participants participated in the programme.



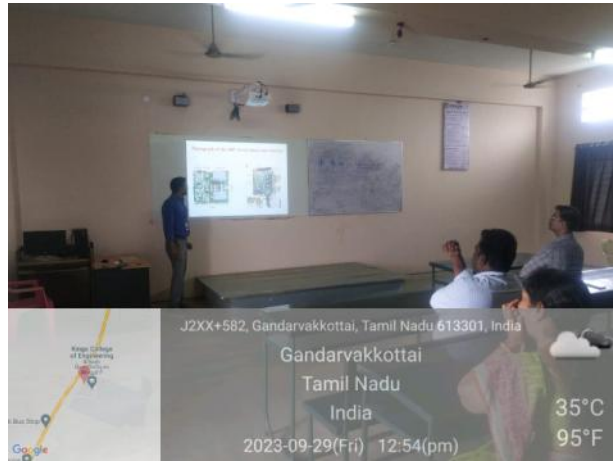
## 6. Seminar on Evolution of Issues on Distributed Systems: A Systematic Review

Department of Electrical and Electronics Engineering in association with IEEE STB 16621 organized a seminar on Evolution of Issues on Distributed Systems: A Systematic Review on 20.09.2023. Dr. A. Prabha, AP/EEE delivered lecture. In her lecture, she briefed on issues in distributed systems.



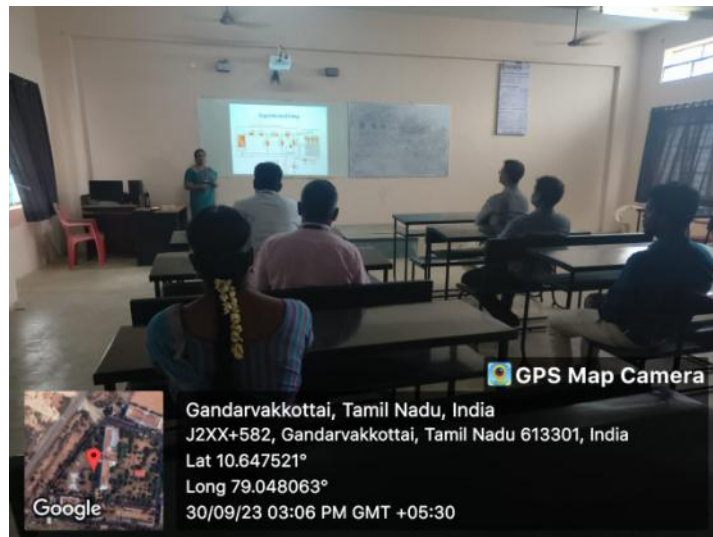
## 7. Seminar on Hybrid Common-mode EMI Filter Design for Electric Vehicle Traction Inverters

Department of Electrical and Electronics Engineering in association with IEEE STB 16621 organized a seminar on Hybrid Common-mode EMI Filter Design for Electric Vehicle Traction Inverters on 29.09.2023. Dr. P. Narasimman, AP/EEE delivered lecture, in his lecture, he briefed on EMI filter design for electric vehicle traction inverters.



## 8. Seminar on Study of PD Signatures in Transformer using Lightning Impulse Voltage Analysis

Department of Electrical and Electronics Engineering in association with IEEE STB 16621 organized a seminar on Study of PD Signatures in Transformer using Lightning Impulse Voltage Analysis on 30.09.2023. Dr. G. Suganya, AP/EEE delivered lecture, in his lecture, he briefed on PD Signatures in Transformers.



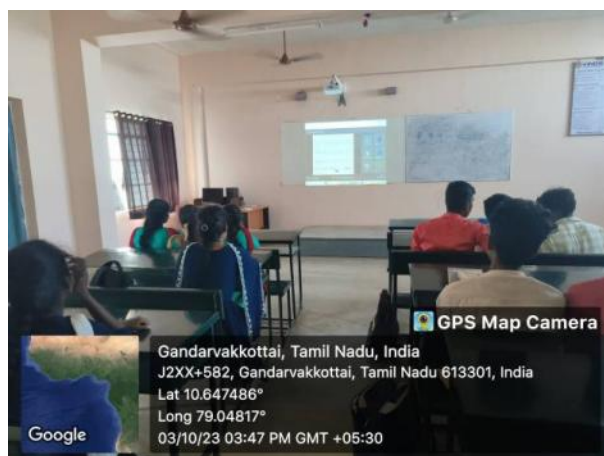
1. **Technical "Connections"**

Department of Electronics and Communication Engineering in association with IEEE STB 16621 organized an event named Technical Connections on 03.10.2023. The event was conducted with three rounds. Ms. Jaishree and Ms. Suruthi from IV year ECE won the First Prize. Winners of the event were appreciated with prizes and certificates. 52 students participated in the event. The event was coordinated by Ms. Eniyarasi and Ms. Swathi of III ECE.



2. **Webinar on Essential ML Techniques for Engineering Projects - A case study Approach.**

IEEE STB 16621 organized a webinar on **Essential ML Techniques for Engineering Projects - A case study Approach** on 04.10.2023. Dr. G. Suganya, AP/EEE welcomed the gathering and introduced the resource person. Dr. K. Kannan, Professor, School of Computing, SASTRA Deemed University, Thanjavur was the resource person. In his lecture, the essentials of Machine learning and various machine learning techniques was presented. While concluding his lecture, he demonstrated a case study on how ML can be applied in various real-time applications. 39 students participated in this webinar.

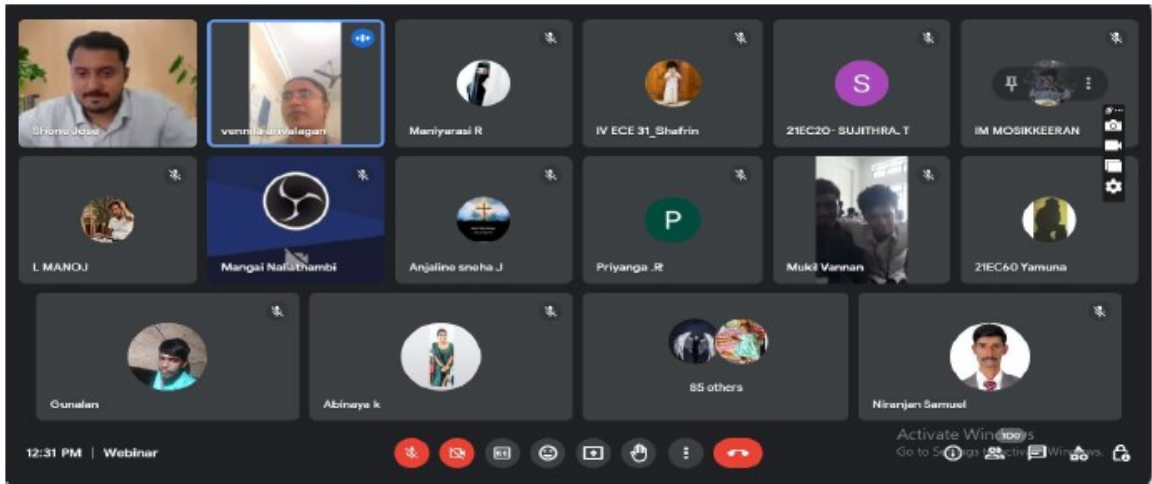


### 3. **One Day Workshop on “Recent Trends in Electrical Engineering”**

Department of Electrical and Electronics Engineering in association with IEEE STB 16621 organized a **One Day Workshop on “Recent Trends in Electrical Engineering”** on 04.10.2023. **Dr. A.Prabha, AP/EEE** delivered welcome address. **Dr.S.Sivakumar**, Vice Principal delivered Presidential Address, in his address, he emphasized that this workshop will be a platform to gain more knowledge about the various technical skills for electrical engineers. He also insisted the students to have a clear idea about the recent trends in Electrical Engineering. **Session-1 was handled by** Dr.S.Sivakumar, Vice Principal on the topic “Introduction to MATLAB”, In his lecture, he explained how MATLAB is used by millions of engineers and scientists to analyze data, develop algorithms, and create models. **Session-2 was handled by Dr.G.Suganya, AP\EEE on the topic** “Exploring High Voltage: Applications and Innovations”. In her lecture, she briefed that High voltage engineering is a key technology used to ensure the power supply and also plays a major role in many technical sectors such as industrial manufacturing or the automotive industry. **Session-3** was handled by **Dr.A.Prabha, AP/EEE** on the topic, “Optimization and Intelligent Algorithms” In her lecture, she briefed on the optimization of a design and how optimization algorithm is executed iteratively by comparing various solutions till an optimum or a satisfactory solution is found. **Session-4** was handled by **Dr.P.Narasimman, AP/EEE on the topic** “Electrical Lighting Design and Calculation”. In his lecture, he discussed the basic types of lighting in a room in order to accomplish Ambient or general lighting, Accent lighting and Task lighting. At the end of the session, feedback was collected from the students. Finally, Event coordinator Mrs.P.Thirumagal, AP/EEE delivered the vote of thanks.

### 4. **Webinar on 5G Skilling**

Department of Electronics and Communication Engineering in association with IEEE STB 16621 organized a webinar on 5G Skilling on 04.10.2023. Mrs. R. Ponni, AP/ECE welcomed the gathering. Mrs. D.Vennila, AP/ECE introduced the resource person. In his lecture, he explained about the evolution of 5G. He also explained about the job roles in the 5G technology sector in India, Such as Network Engineer, System Integrator, Solutions Architect, Software Developer, Data Analyst, Network Security Specialist and Product Manager. 101 students participated in the programme and got benefitted.



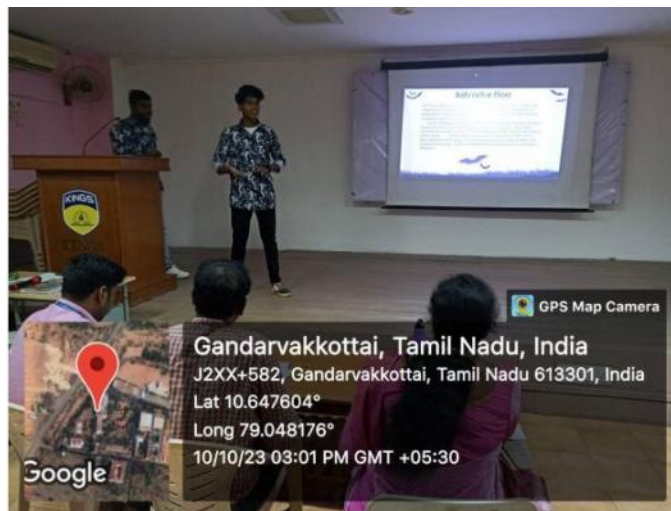
## 5. Tech PBC

As part of IEEE day, Department of Computer Science and Engineering in association with IEEE STB 16621 organized an event named **TECH PBC** (Pictorial, Bingo, Charades) on 06.10.2023 involving 74 teams from the departments of CIVIL, CSE, ECE, EEE & MECH. The event took place on three levels. Five teams made it to the final round out of 74 teams. R.Veerakumar & Team from MECH won I Prize, S.Reena & Team from CSE won II Prize, S.Ananthi & Team from CIVIL, S.Divakar & Team from EEE and S.Saravanana & Team from ECE won III Prize.



## 6. National Level Technical Symposium Enigma2K23

Department of Electrical and Electronics Engineering in association with IEEE STB 16621 organized National Level Technical Symposium Enigma2K23 on 10.10.2023. The session started with the prayer song Tamizhthai vazhthu. Lighting the holy lamp is considered as an important ceremony. The Chief Guest, Secretary, Principal, Vice Principal and a Participant from the student are invited to light the lamp. Our Secretary Dr.R.Rajendran honored the chief guest Dr.M.Venkata kirthiga, Professor, NIT, Trichy with a memento. Dr.R.Rajendran, Secretary, Kings College of Engineering delivered his presidential address. Dr.J.ArputhaVijaya Selvi, Principal of KCE delivered her Inaugural address. Dr.S.Sivakumar, Vice Principal, KCE delivered his Special Address. The symposium souvenir has been released by chief guest and received by HOD/EEE. Mr.M.Mukesh of IV Year EEE, introduced the chief guest. Chief Guest address was given by Dr.M.Venkata kirthiga, Professor, NIT, Trichy. The valedictory session started with feedback from the participants. The winners for the paper presentation were awarded with the cash prize. Finally, vote of thanks was delivered by Mr.C.PraveenKumar of final year EEE.



## 7. National Level Technical Symposium Electrovibez

Department of Electronics and Communication Engineering in association with IEEE STB 16621 organized National Level Technical Symposium Electrovibez on 10.10.2023. The session started with the prayer song, Holy lamp was lit by the dignitaries. Our Secretary Dr.R.Rajendran honored the chief guest **Dr M Senthil Sivakumar**, Assistant Professor, Indian Institute of Information Technology, Tiruchirappalli. Dr.R.Rajendran, Secretary, Kings College of Engineering delivered his presidential address. Dr.J.ArputhaVijaya Selvi, Principal of KCE delivered her Inaugural address. Dr.S.Sivakumar, Vice Principal, KCE delivered his Special Address. The symposium souvenir has been released by chief guest and received by HOD/ECE. Chief Guest address was given by **Dr M Senthil Sivakumar**. During the valedictory session feedback was collected from the participants. The winners for the paper

presentation were awarded with the cash prize. Finally, vote of thanks was delivered by student member.



#### 8. National Level Technical Symposium CISABZ'23

Department of Computer Science and Engineering in association with IEEE STB 16621 organized National Level Technical Symposium CISABZ'23 on 10.10.2023. Ms. B. Senthamizh Selvi, who currently serves as the Talent Acquisition Lead at Think Global Technologies Pvt. Ltd in Chennai was the chief guest. The chief guest offered valuable insights into the world of job interviews and the art of crafting compelling resumes. Her guidance was particularly beneficial to the students who were on the cusp of graduating and stepping into the job market. CISABZ'23 managed to attract the participation of nearly 200 students from different engineering colleges. . As the day drew to a close, the event concluded with a valedictory function, the certificates were distributed to the winners and participants. The symposium was ended with vote of thanks delivered by Ms. A.C.Arunothaya, Vice president of IV year CSE.



#### 9. Mini Project Expo

Department of Electronics and Communication Engineering in association with IEEE STB 16621 organized **Mini Project Expo** on 10.10.2023. **Mr. Swami Prabakaran**, Senior Software Engineer, Ejyle Technologies Pvt. Ltd., Bangalore acted as Jury for the expo. 16



Projects were displayed and 65 students participated in the expo. The event was coordinated by Mr. R.Thandayuthapani, AP/ ECE.



#### 10. IEEE MAS sponsored Workshop on "Data Science & Machine Learning"

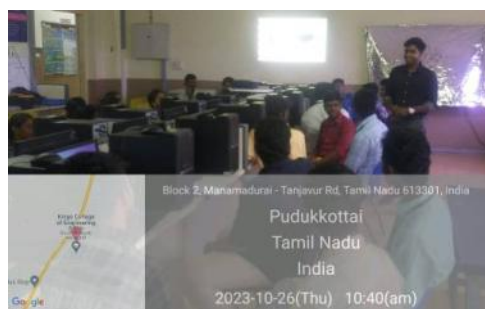
Department of Computer Science and Engineering in association with IEEE STB 16621 organized **IEEE Madras Section sponsored A Three-Day National Level Workshop on "Data Science & Machine Learning"** from 18.10.2023 to 20.10.2023. On 18.10.2023, Inaugural function was graced by Dr. J. Arputha Vijaya Selvi Selvi, Principal & STB SBC. Dr.K. Abhirami, HOD(i/c)/CSE welcomed the gathering. Dr. J. Arputha Vijaya Selvi, delivered inaugural address, in her address, she stressed on the importance of IEEE membership and benefits to IEEE members. Also she stated the Data Science is a booming field and there is a large market open for Data Science and Machine Learning experts. Session-1 was handled by Dr. K. Lakshmi, Professor, Sri Manakula Vinayagar Engineering College, Puducherry. In her session, she briefed on Python programming and foundational statistics. Session-2 was handled by Mr.K.M.Arivu Chelvan, S/w Architect, E.K software solutions, Thanjavur. In his session, he briefed on NumPy and Pandas. Session-3 was handled by Dr.M.Brindha, Asst Professor, National Institute of Technology, Trichy. Her session brought a deep dive into data visualization. Session-4 was handled by Dr.S.Kanimozhi, Asst Professor, Vellore Institute of Technology, Vellore. During her session, she briefed on statistical analysis tailored for data. Session-5 was handled by Mr.S.Ramprakash, Teaching Fellow, UCE, Thirukkuvilai. In his session, he showcased real-world data science applications. Session-6 was handled by Mr.S.Dinesh Dhanabalan, Asst Professor, Arifa Institute of Technology, Esanoor and the session was an interactive hands-on session. Participants not only gained theoretical knowledge but also honed their practical skills, empowering them to tackle real-world challenges in the ever-evolving fields of data science and machine learning. The overall summary was dictated by Ms. S. Abikayil Aarthi, Convener of the programme. Feedback was collected from the participants. Certificate of Participation was provided to

all the Participants. Vote of Thanks was proposed by Ms. B. Bavithra, AP/CSE, KCE. The programme was attended by 94 participants from all over India.



### 11. Two Days Workshop on IoT with Arduino / Raspberry Pi

Center of Excellence in IoT in association with IEEE STB 16621 and Armada Industrial Automation organized **Two Days Workshop on IoT with Arduino / Raspberry Pi** on 26.10.2023 & 27.10.2023. Session-1 was handled by resource persons from Armada Industrial Automation, Thanjavur. During the session different types of sensors & IoT concepts were discussed. Session-2 was handled by Dr. T. Pasupathi. In his lecture, he discussed on Arduino basics & simple projects. Session-3 was handled by Dr. P. Narasimman. In his lecture, he handled Arduino based real- time projects using Tinkercad. Session-4 was handled by Mr. T. Jayaseelan. During his session, He demonstrated Arduino interface with different sensor and serial communication. 46 students participated in the programme and got benefitted. The event was coordinated by student coordinator Mr. P. Jayaprasad, III ECE.



### 12. Webinar on "Paper Writing and Patents"

Research & Development Section in association with IEEE STB 16621 organized **Webinar on "Paper Writing and Patents"** on 28.10.2023. Ms. Jayachitra Sekar, Asst. Professor, PSNA College of Engineering and Technology in Dindugal was the resource person. She began by discussing the fundamentals of academic paper writing, covering the structure, content, and organization of research papers. She provided practical tips on how to select suitable journals, write an abstract, and format references, among other key elements. Ms. Jayachitra Sekar's expertise in this area was evident, and her guidance was highly valuable

to the audience. Following the discussion on paper writing, Ms. Jayachitra Sekar shifted her focus to patents. She explained the significance of patents in protecting intellectual property and the innovation process. Ms. Jayachitra Sekar detailed the patent application process and highlighted its legal and commercial implications. Her comprehensive explanation shed light on the relevance of patents to researchers, inventors, and professionals in various fields.

The screenshot shows a Zoom meeting interface. The main window displays a presentation slide titled "INTELLECTUAL PROPERTY (IP)". The slide content includes:

- Intellectual Property is a property that arises from the human intellect. It is a product of human creation.
- Intellectual Property comprises 2 distinct forms:
- Literary & Artistic Works
- Industrial Property

The slide also features a word cloud on the left with terms like "copyright", "patent", "trademark", and "intellectual property".

On the right side of the Zoom window, there is a grid of participant avatars. The participants listed are:

- JAYACHITRA SEKAR (Presenting)
- Vidhi 1390
- Sabanayagam Sundaram
- Pasupathi T
- 25 others
- Niranjani Sarmul

The bottom of the Zoom window shows a toolbar with icons for mute, video, chat, and other functions. The system tray at the very bottom indicates the time as 9:52 AM on 10/28/2023.

1. **Motivational Talk on Career Guidance**

Department of Computer Science and Engineering in association with IEEE STB 16621 organized a **Motivational Talk on Career Guidance** on 01.11.2023 at Government Boys Higher Secondary School, Budalur, Near Thanjavur. Mrs. R. Sugantha Lakshmi, AP/CSE addressed the students. In her lecture, she shared the tips to excel in their higher education and career. 80 students participated in the programme and got benefitted.



2. **Motivational Talk on Unlocking the Power Within You**

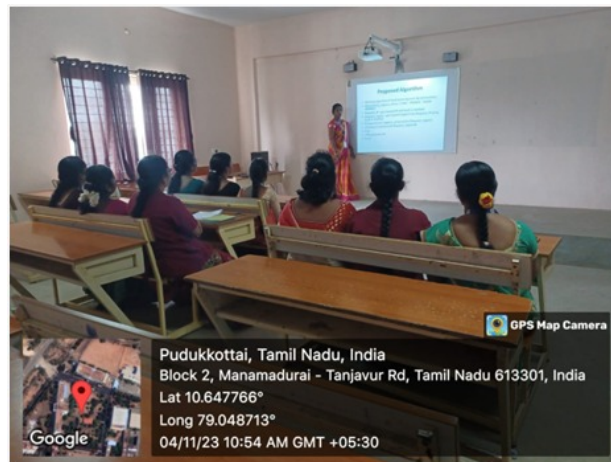
Department of Computer Science and Engineering in association with IEEE STB 16621 organized a **Motivational Talk on Career Guidance** on 01.11.2023 at Government Girls Higher Secondary School, Budalur, Near Thanjavur. Mrs.D.Mangalambigai, AP/CSE addressed the students. 150 students participated in the programme and got benefitted.



3. **Staff Seminar on Load Balancing framework for cross region tasks in cloud computing**

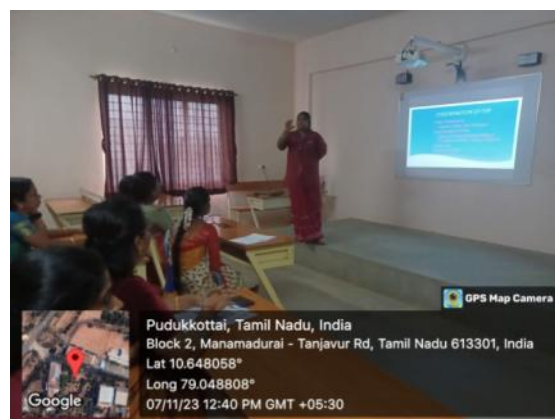
Department of Computer Science and Engineering in association with IEEE STB 16621 organized a **Seminar on Load Balancing framework for cross region tasks in cloud computing** on 04.11.2023. Ms.B.Sangeetha, AP/CSE delivered lecture. In her lecture, she presented a load balancing framework designed to manage and distribute tasks across

multiple regions in cloud computing environments. The framework aims to optimize resource utilization, enhance fault tolerance, and improve overall performance by intelligently distributing tasks across different regions. 12 staff members attended the seminar.



#### 4. Staff Seminar on Emerging Technologies

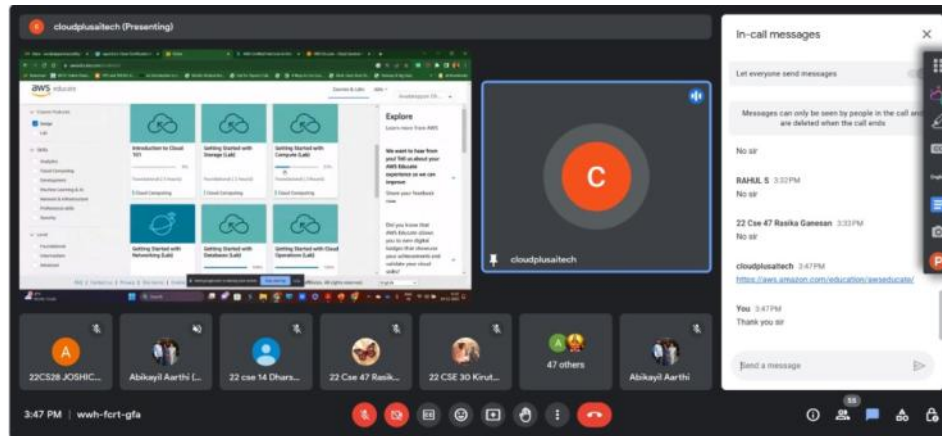
Department of Computer Science and Engineering in association with IEEE STB 16621 organized a **Seminar on Emerging Technologies** on 07.11.2023. Ms.S.Abhikayil Aarthi, AP/CSE delivered lecture. In her lecture, she briefed on the various areas in the emerging technologies. In Design Thinking Starter, we adopt Empathy, Define, Idea and Prototypes. During the Project Management Phase, Collection of data, Analysis, Building of Prototypes, Prediction, Testing and Feedbacks. Also discussed about Cyber Security and AI Technologies. 13 staff members attended the seminar.



#### 5. Workshop on Cloud Computing (AWS)

Department of Computer Science and Engineering organized a Workshop on "**Cloud Computing with Amazon Web Services (AWS)**" on 14.11.2023. **Dr. T. Avudaiappan**, AWS- Certified Solution Architect, Associate Professor, K. Ramakrishnan College of Technology, Tiruchirapalli was the resource person. The workshop provided a comprehensive overview of cloud concepts, AWS services, and certification courses on

cloud. The interactive sessions and hands-on exercises contributed to a comprehensive learning experience. 70 students participated in the programme and got benefitted.



## 6. Technical Quiz Series - Control Systems

Department of EEE in association with IEEE STB 16621 organized Technical Quiz Series - Control Systems on 14.11.2023. 25 students participated in the quiz. The event was coordinated by Dr. P. Narasimman, AP/EEE.

## 7. Technical Quiz – VLSI

Department of ECE in association with IEEE STB 16621 organized technical quiz on VLSI on 22.11.2023 between 05:00 p.m. and 07:00 p.m. 44 students participated in the quiz. The event was coordinated by Dr. T. Pasupathi, AP/ECE.

## 8. Students EXECOM meeting

IEEE Student Branch EXECOM meeting was organized on 22.11.2023 between 01.15 p.m. and 01.45 p.m. Dr. J. Arputha Vijaya Selvi, SBC presided over the meeting. Ms. B.M. Nithyashri, Vice Chairman, STB 16621 welcomed the members. Ms. Abikayil Aarthi S, Secretary briefed on the Action Plan for the year 2024 and conduct of membership development drive.



1. **Awareness Programme on Women’s Safety in Society**

Women’s cell and IEEE jointly organized by awareness session on “**Women’s Safety in Society**” to girl students. **Dr.A.Prabha**, Assistant Professor, Kings College of Engineering, Thanjavur acted as resource person, on 01<sup>st</sup> December 2023 from 11.00 a.m. -12.30 p.m. at Pallava Hall. The resource person insisted the students to follow parents’ guidance. Also she pointed out intuition is a powerful weapon it works and save every one. Teenage is golden age because in this stage the future is built. So she asked the students to focus on developing skills. She insisted the students to practice yoga and Meditation. Training our mind in a right direction will help us to lead a peaceful life. Self discipline and safety are like two sides of a coin.



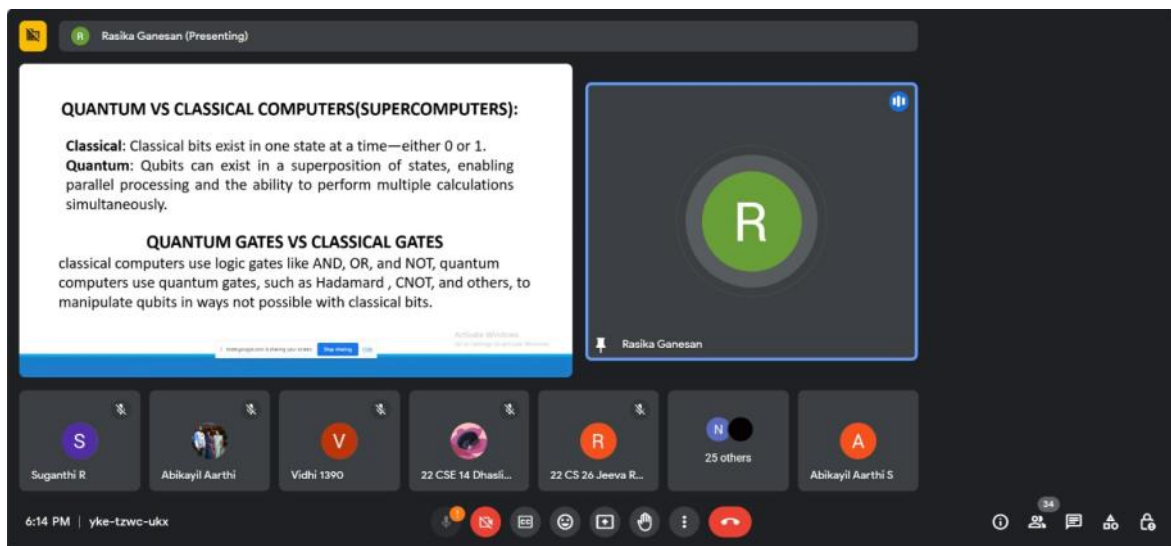
2. **Student Branch Meeting**

IEEE Student Branch meeting of STB 16621 was held on 08.12.2023 by 10:00 a.m. at Pallava Hall. Ms. B.M. Nithyashri, Vice Chair and III CSE student welcomed the gathering. Dr. J. Arputha Vijaya Selvi, IEEE SB Counselor briefed on the activities carried out by the branch and importance on IEEE membership. Ms. S. Abikayil Aarthi, Secretary STB 16621 listed out the future plans for the year 2024. Around 50 students attended the meeting. Ms. xxx delivered vote of thanks.



### 3. IEEE Spectrum Talk on IBM Quantum Computing

IEEE STB 16621 organized a Spectrum Talk on IBM Quantum Computing on 08.12.2023. Ms. G.Rasika, II CSE student delivered lecture. In her lecture, gave an introduction to Quantum computing, that utilizes the principal of quantum mechanics to perform computation whereas classical computers use bits to represent information as 0's and 1's. Also she quoted that quantum computers gives faster and accurate results than classical computers in solving the hardest problems. While concluding she listed the specialty in IBM's quantum computer using ZNE technique and by using this technique they reduced the issues in quantum computing. Ms. S. Abikayil Aarthi, Secretary STB 16621 moderated the event. 44 students participated and got benefitted. Ms. B.M. Nithyashri and Ms. J. Keerthana of CSE department acted as Student volunteers.



### 4. Energy Conservation Day - Technical Quiz

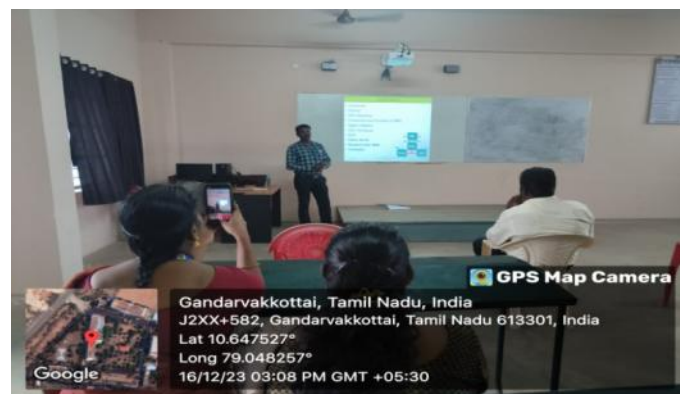
Department of EEE in association with IEEE has organized Technical Quiz through Google forms from 14<sup>th</sup> to 18<sup>th</sup> December, 2023. Quiz comprised of 25 questions and 2 points were awarded for each correct answer. 183 students participated in the programme. Ms. Abinayasri K, II Year Civil Engineering bagged I position, Mr. AJAY, IV Year ECE bagged II position and Ms. Abhiraami SP, I Year from KPR Institute of Engineering and Technology bagged III position. Mr. J. Arokkiaraj, AP/EEE and Mr. S.R. Karthikeyan, AP/EEE coordinated the event.





5. **Seminar on Development of a Battery Management system with special focus on capacity Estimation and Thermal Management**

Department of EEE in association with IEEE has organized Internal Seminar on **“Development of a Battery Management System with Special Focus on Capacity Estimation and Thermal Management”** on 16.12.2023. During his session, he started with basic Introduction about converter topologies and the importance of Electric and Hybrid Electric vehicles. He pointed out that, the large number of automobiles in use around the world has caused and continues to cause serious problems of environment and human life. Air pollution, global warming, and the rapid depletion of the earth’s petroleum resources are now serious problems. Electric Vehicles (EVs), Hybrid Electric Vehicles (HEVs) and Fuel Cell Electric Vehicles (FCEVs) have been typically proposed to replace conventional vehicles in the near future.



6. **IEEE Spectrum Talk on The Rise of Floating Wind Power: Advancements and Challenges**

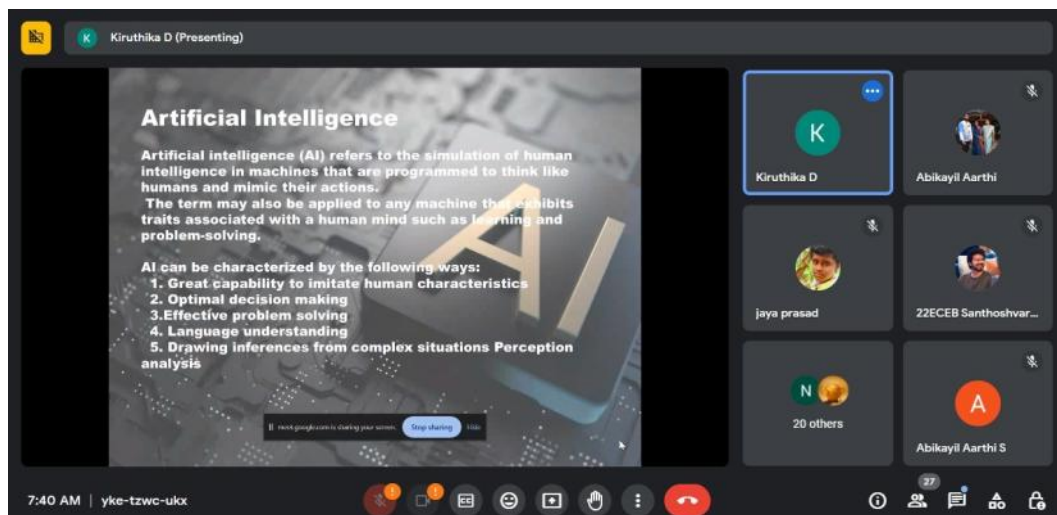
IEEE STB 16621 organized a Spectrum Talk on **The Rise of Floating Wind Power: Advancements and Challenges** on 20.12.2023. Ms. P Priya Niranjani, II EEE student delivered lecture. In her lecture, she briefed on the significance of harnessing wind energy over deep waters as well as overview of India’s initiatives and plans in the floating wind power project. Ms. S. Abikayil Aarthi, Secretary STB 16621 moderated the event. 53 students

participated and got benefitted. Ms. Sivasangari G and Ms. Abinaya M from EEE department acted as student volunteers.



## 7. IEEE Spectrum Talk on AI Powered Micro Display for Eyesight

IEEE STB 16621 organized a Spectrum Talk on **AI Powered Micro Display for Eyesight** on 29.12.2023. Mr. P. Jaya Prasad, welcomed the gathering. Ms. Kiruthika D, II ECE student delivered lecture. In her lecture, she briefed the application of AI in the area of biomedical engineering. The design perspective of micro display for eyesight using AI and the challenges are explained. Ms. S. Abikayil Aarthi, Secretary STB 16621 moderated the event. Members of student branch and 45 students from CSE, ECE and EEE departments participated and got benefitted. Mr. Ranjith M proposed vote of thanks. Mr. Ranjith M, IV ECE and Mr. P. Jaya Prasad, III ECE acted as student volunteers.



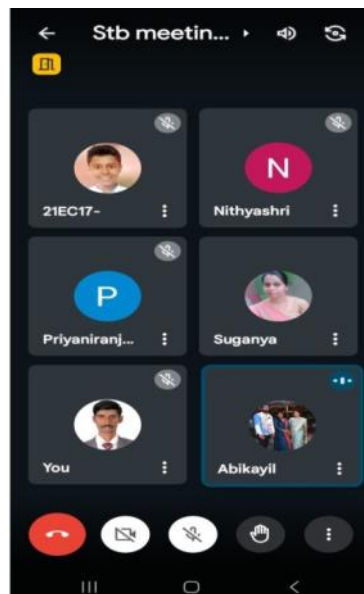
1. **Poster Design Competition**

IEEE STB 16621 organized **Poster Design Competition** on the theme IEEE Banner Designing from 17.12.2023 to 05.01.2024 through Google forms. 10 participants submitted their entries. Juries selected three contestant based on design and creativity: First Position, Mr. K. Suresh, Third Year, Dept. of Mech, Second Position Mr. K. Akash, First Year, Dept. of CSE and Third Position Mr. S. Hasidhikshana, Second Year, Dept. of ECE. Special Mentions Mr. C. Veeramani, First Year, Dept. of CSE - AI & DS. They were awarded with certificate of appreciation. Ms. B.M. Nithyashri and Ms. J. Keerthana of CSE Department acted as student volunteers.



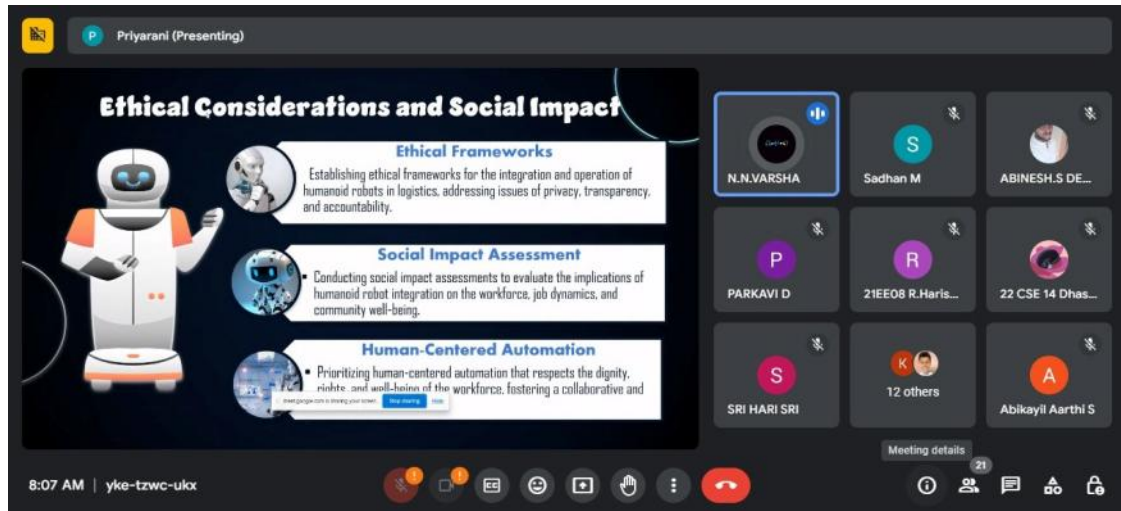
2. EXECOM Meeting – I

Executive Meeting of the STB 16621 was held on 12.01.2024. Dr. J. Arputha Vijaya Selvi presided over the meeting. Ms. B.M. Nithyashri, Vice Chairman welcomed the EXECOM members and briefed the plan for the first quarter of the year 2024. SB Counselor insisted the office bearers to involve volunteers in SB activities and concentrate more on extension activities. Also she approved the plan presented by the Vice Chairman. Ms. Abikayil Aarthi S, Secretary proposed vote of thanks.



### 3. IEEE Spectrum Talk on **Commercial Development of Humanoid Robots in Logistics**

Department of Computer Science and Engineering in association with IEEE STB 16621 is organizing IEEE Spectrum Talk on **Commercial Development of Humanoid Robots in Logistics** on 26.01.2024 between 06:00 p.m. and 07:00 p.m. Ms. B.M. Nithyashri, SB Chairperson, welcomed the gathering. Ms. B. Priyarani & Ms. N.N.Varsha, IV CSE student shared their views. 27 students participated in the event. Ms. Dhaslima shafreen proposed Vote of Thanks. Ms. G.Rasika & Ms. R V Atchaya acted as student volunteers.



**1. Orientation Programme – CSE**

Department of Electronics and Communication Engineering organized orientation programme on 01.02.2024. The session was handled by Ms. S. Abikayil Aarthi, AP/CSE cum Secretary IEEE Student Branch. In her lecture, she narrated that IEEE membership has benefits including venues and tools for members to network with people across the globe and acquire leadership skills by organizing events. Also, she listed out the various funding schemes in IEEE. Around 60 students participated in the event.

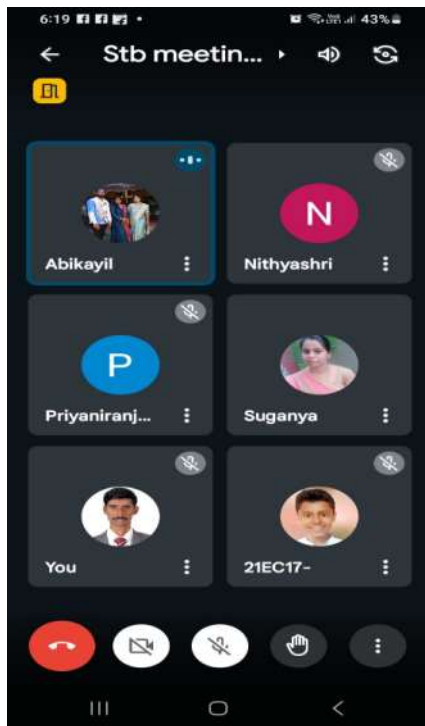


**2. Orientation Programme – ECE**

Department of Electronics and Communication Engineering organized orientation programme on 01.02.2024. During the session-1, Dr. T. Shanthi, Assoc. Prof/ECE delivered a lecture on Emerging Trends in Networking. In the session-2, Mrs. Shyamala, CADD center, Thanjavur gave a Talk on Artificial Intelligence and Machine Learning. In the session-3, Mrs. U. Jeyamalar, AP/ECE delivered a lecture on Introduction to Virtual Instrumentation. In the session-4, Mr.T.Jeyaseelan, AP/ECE gave a talk on Embedded Systems and IOT Design. During the session-5, Mr.S. Jagadish Kumar, CEO, Navil Software, Thanjavur gave a talk on Digital marketing. In this programme, 60 students participated in the programme and was coordinated by Mr.T.Jeyaseelan, AP/ECE.

**3. Student Branch Meeting – I**

IEEE Student Branch meeting of STB 16621 was held on 06.02.2024 by 06:30 p.m. in online mode. Ms. B.M. Nithyashri, Chair and III CSE student welcomed the gathering. Ms. S. Abikayil Aarthi, Secretary STB 16621 listed out the plans for the month of February 2024.



#### 4. Spectrum Talk Recent Trends in Agrivoltaics

Department of Electrical and Electronics Engineering organized online spectrum talk on Recent Trends in Agrivoltaics on 09.02.2024. Ms. R. Kanimozhi, IV EEE student delivered lecture. In her lecture, she briefed on the efforts to combine solar technology and farming that have been underway for a decade. Also, she briefed on Hildebrandt concept, that vertical solar panels can be used on farmland to collect energy both in the morning and evening, which counterbalances other solar plants. She also briefed on the India's largest vertical solar farm with a capacity of 120kW in Bengaluru by Tata Power Solar and Dell India. While concluding her talk, she mentioned that Gro Solar Energy has installed a 7 MW solar project in Maharashtra, where it has integrated solar panels with drip irrigation for crops like sugarcane and banana. The project has increased the crop yield and reduced the water consumption by 40%. Ms. G. Sivasankari and Ms. M. Abinaya acted as student volunteers.



#### 5. Awareness Programme for Farmers

An awareness program on the **Welfare and Development of Farmers** was organized by IEEE Student Branch, Kings College of Engineering. Dr. J. Arputha Vijaya Selvi, Principal & IEEE SBC, Kings College of Engineering, welcomed all the special invitees and farmers to the program. Dr.

R. Rajendran, Secretary, KCE delivered a presidential address on the challenges faced by the farmers, their well-being and sustainable practices to improve agricultural productivity. The program was inaugurated by Dr. A. Velayutham, Principal, Dr. MS Swaminathan Agricultural College and Research Centre, Eachankottai. In his address, Dr. A. Velayutham, gave insights into the current state of agriculture, challenges faced by farmers and possible solutions for sustainable development. Dr. R.Umashankareshwari, Associate Professor of the Agricultural College highlighted various potential components like agricultural policies, technical interventions, financial assistance and market linkages. Agriculture Officer T. Kannan explained the farmers about the use of modern technologies in agriculture (Uzhavan App) in a very simple way that the farmers could easily understand. At the end of the program, Dr. S. Sivakumar, Vice Principal & Advisor IEEE STB delivered a vote of thanks. At the end of the programme, all the farmers were given 5 kg of natural fertilizer by SPIC Ltd., to encourage organic farming. The farmers happily expressed their gratitude and appreciated the college administration and the organizers. Around 250 farmers participated in the programme.



## 6. Outreach Programme on Awareness of IoT

Department of Electronics and Communication Engineering organized Outreach Programme on Awareness of IoT on 22.02.2024 at Little Flowers Higher Secondary School, Kumbakonam. The session was handled by Mr.T.Jeyaseelan, AP/ECE. During the session, he briefed on the simple projects using Raspberry Pi. Around 120 students participated in the programme.



## 7. Spectrum Talk

Department of Electronics and Communication Engineering organized online spectrum talk on Energy from Wire's Magnetic Field for IoT Applications on 23.02.2024. Ms. G. Jothika, IV ECE student delivered lecture. In her lecture, she briefed on technique of generating energy from wire's magnetic field. The generated energy could be used for IoT Applications. Energy is generated by clamping energy harvester around a wire carrying current which uses electromagnet induction harvest energy from the magnetic field produced by the current. Mr. P. Jaya Prasad acted as student volunteer.



## 8. National Science Day Celebrations

In view of National Science Day Celebrations, Poster Design Competition on the theme “**Science for a Sustainable Future**” was organized in online mode from 20.02.2024 to 28.02.2024. 27 entries were received, based on the creativity and relevance to the theme two posters was selected. **Ms. P. Sneha** of IV EEE bagged the first prize and **Mr. S. Lexmadurai** of II CSE bagged the second prize. The winners were given shield and certificate of appreciation.



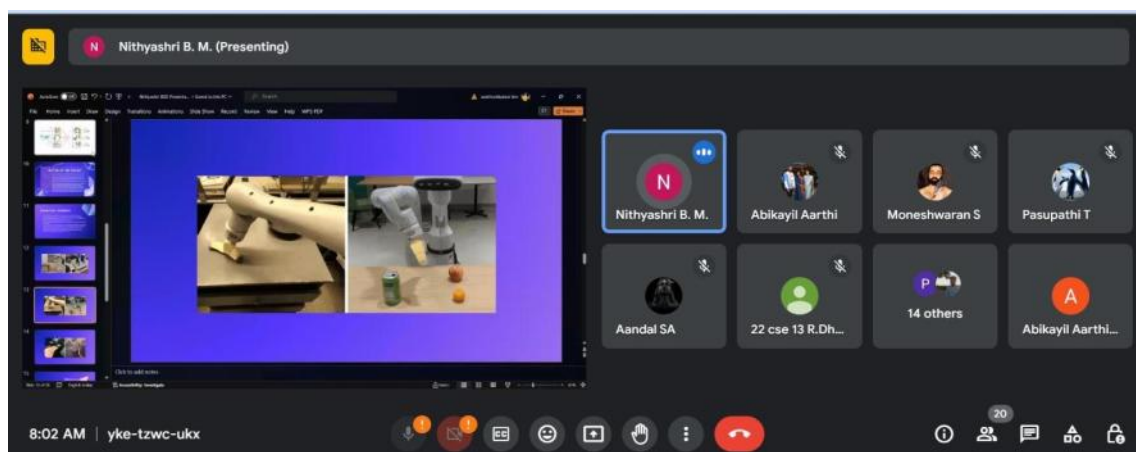


### 1. WIE - Officer Bearers Meeting

The IEEE Women in Engineering Affinity Group office bearers meeting was held on 01.03.2024. Dr. A. Prabha, Faculty Mentor presided over the member, and the office bearers were assigned the responsibilities, Ms. B. Priyarani, **Chairperson**, Ms. G. Rasika, **Vice Chair**, Ms. D. Kiruthika, **Secretary** and Ms .S .Abikayil Aarthi, **Treasurer**. The activities to be done during the year 2024 was discussed.

### 2. IEEE Spectrum Talk on The Global Project to Make a General Robotic Brain

IEEE Spectrum Talk on The Global Project to Make a General Robotic Brain was organized on 01.03.2024. Ms. B.M. Nithyashri, III CSE delivered lecture. In her lecture, she briefed on the concept of creating a general robotic brain referring to a global effort aimed at developing Artificial Intelligence (AI) systems that possess versatile cognitive abilities akin to those of the human brain. This ambitious project seeks to imbue robots with the capacity to perceive, learn, reason, and adapt to various tasks and environments, mirroring the broad spectrum of capabilities exhibited by humans. Key objectives of this endeavor include advancing machine learning algorithms, enhancing sensor technologies, and fostering interdisciplinary collaboration among experts in robotics, neuroscience, computer science, and related fields. Ultimately, the goal is to produce intelligent machines capable of autonomously performing complex tasks across diverse domains, from healthcare and manufacturing to exploration and service industries. Despite its promising potential, the project faces significant challenges, including ethical considerations, safety concerns, and the need for robust regulatory frameworks to govern the deployment and usage of advanced AI systems.



### 3. Inauguration of WIE AG

Women in Engineering Affinity Group of our college was inaugurated on 07.03.2024. Dr. A. Prabha, Faculty Mentor – WIE, welcomed the gathering. Dr. J. Arputha Vijaya Selvi, Principal & Faculty Advisor delivered the Inaugural Address. Ms. G. Rasika, Vice Chairman – SBA 16621 introduced the chief guest. Dr. T. Sree Sharmila, Chair- IEEE WIE Madras Section,

Chennai (Region -10) delivered a special address. In her address she explained how we can make use of IEEE –WIE for the development of our Engineering career and also explained about the available Scholarships and Awards under WIE. IEEE members of Kings College of Engineering attended the function. Ms. S. Abikayil Aarthi, Treasurer proposed the vote of thanks.



#### 4. Webinar on AI Tools for Academic Research, Writing, and Publishing

Department of Computer Science and Engineering in association with R & D Section and IEEE STB 16621 organized a webinar on AI Tools for Academic Research, Writing, and Publishing. Dr. K. S. Sowmiya Rani, Cactus Communications, Mumbai delivered a lecture. In her lecture, she briefed on the various AI tools available for academic research writing and publishing. Also she demonstrated the usage of the tools that can be used for research writing. 69 participants participated in the webinar and got benefitted.



#### 5. International Women's Day Celebration

Women's Cell of our institution in association with IEEE WIE AG organized the International Women's Day Celebration on 08.03.2024. Faculty members were sharing their experience and knowledge. Dr. J. Arputha Vijaya Selvi, Principal explained the importance of Education to girl child. Also she pointed out the impact of technology which affects the teenage students. Dr. T. Shanthi Professor & Head /ECE insisted the students participate in extracurricular activities. Dr. A. Abirami, Head /IQAC and Mrs. D. Mangalambigai, AP CSE explained about Health and how to maintain good health to lead a successful life. They

discussed the difficulties faced by them and how they converted them as stepping stones to success. Dr.A.Prabha, AP/ EEE suggested the students to be bold to face the challenges in life. Various competitions were conducted for the students, viz Singing, Dancing, Drawing and Speech.



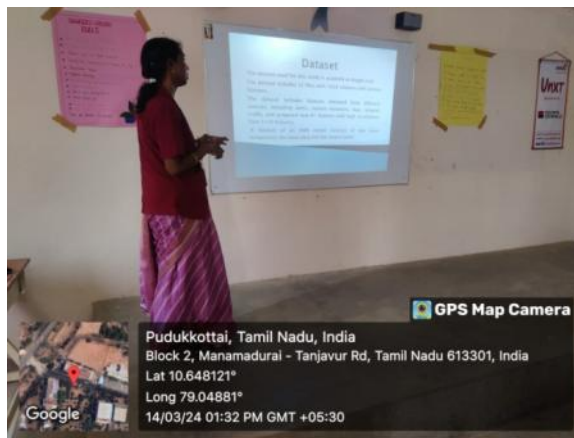
## 6. Orientation Programme

Department of Electronics and Communication Engineering, Kings College of Engineering organized an Orientation Program for II year undergraduate ECE students on 13.03.2024. Ms. Shyamala, CADD center, Thanjavur presented a guest talk on **“Artificial Intelligence”** and her team member Mr.Sathish presented about **“Machine Learning”**. Mr.R.Thandayuthapani, AP/ECE presented a Motivation Talk on **“Mini project”**. Mr. W. Newton David Raj, AP/ECE presented a talk on **“Personal Health practices”**. Mr.R.Balakrishnan, AP/ECE presented a talk on **“procedures and Benefits of Industrial Training and Internship”**. Mr. T. Jeyaseelan, AP/ECE presented a Technical Talk on **“Embedded and IOT Systems Design”**.



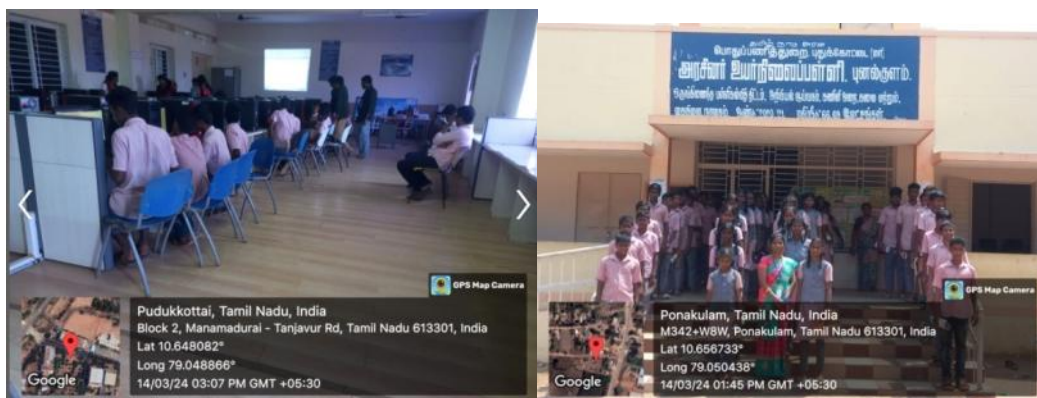
## 7. Internal staff seminar - Cloud Computing Security and Deep Learning: An ANN Approach

Department of Computer Science and Engineering organized internal staff seminar on **Cloud Computing Security and Deep Learning: An ANN Approach** on 14.03.2024. Ms.M. Vidhya, AP/ CSE delivered the lecture. In her lecture, she explored the intersection of two rapidly evolving fields, cloud computing security and deep learning. Also she briefed on the integration of Deep Learning with Cloud Computing Security and Key Components of the Approach. While concluding, Cloud Computing Security and Deep Learning: An ANN Approach represents a promising research direction to address critical security challenges in cloud environments through the application of advanced deep learning techniques.



## 8. Outreach Programme for School Students on Microsoft Office

Department of Computer Science and Engineering organized an Outreach Programme on Microsoft Office for School Students of Government High School on 14.03.2024. Ms. B. Sangeetha, AP/CSE and Mr.M. Arun, AP/CSE handled the sessions.



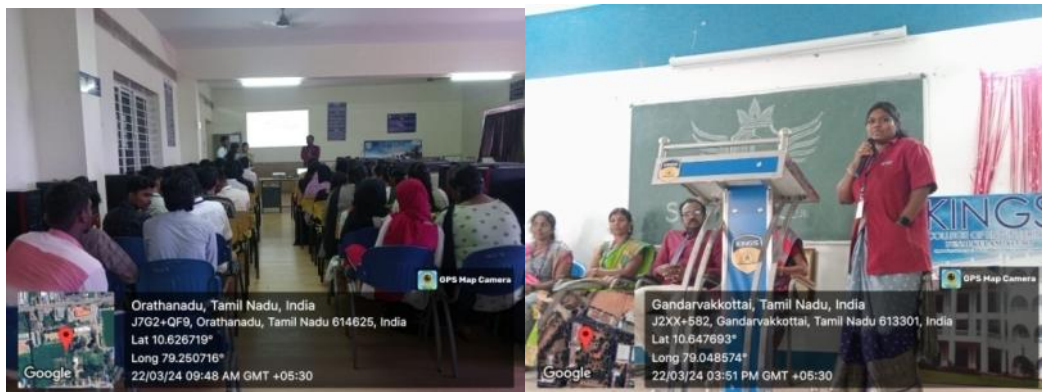
## 9. Career Guidance Programme

Career Guidance Programme for the students of Government Polytechnic College, Gandarvakottai was organized on 19.03.2024. Dr. R. Sarvanan, HOD/Civil briefed the students on the various career opportunities available in Government and Private Sector. Also, he briefed on the scope of higher education.



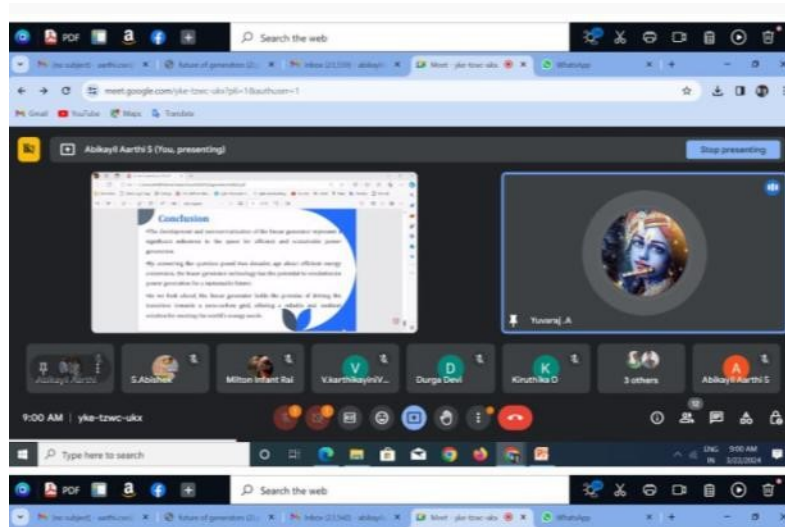
## 10. Workshop on Full stack Development

Department of Computer Science and Engineering organized a workshop on Full Stack Development on 22.03.2024. Mr. K. S. Guruprakash, AP/CSE, K. Ramakrishnan College of Engineering, Tiruchirappalli delivered a lecture. In his lecture, he briefed on comprehensive knowledge and practical skills in developing both the front-end and back-end components of web applications. Also he briefed on the Overview of Full Stack Development, importance and benefits of Full Stack Development in modern web development. The participants gained a structured learning experience with hands-on exercises, projects, and opportunities for interaction and collaboration, ultimately empowering participants to pursue careers or projects in Full Stack Development. Around 48 students participated in the programme.



## 11. Online Spectrum Talk on Future of Generators!!!

IEEE Spectrum Talk on Future of Generators !!! was organized on 22.03.2024. Mr. A. Yuvaraj, III EEE delivered a lecture. In his lecture, he described that linear generator can quickly switch between different types of green fuel, including biogas, ammonia, and hydrogen and Figuring out the generator's design. Also he briefed on how power generation using the linear generator is affordable and the journey how Linear generation reached the real world.



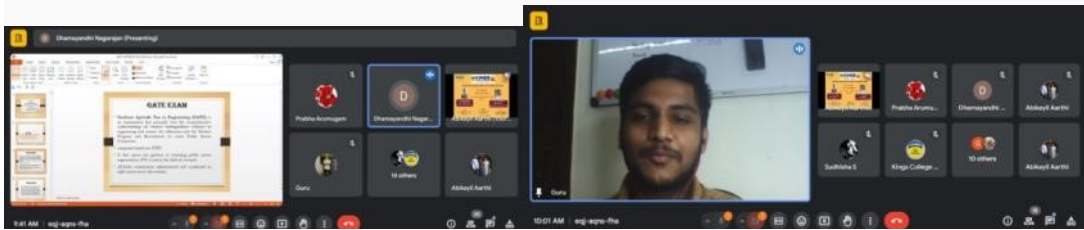
## 12. IEEE YESIST'12 PRELIMS

The YESIST12 2024 Prelims was hosted by **Kings College of Engineering**. The event brings together young minds from diverse backgrounds to collaborate, innovate, and create solutions that have a positive impact on society. The prelims was declared open at 09:30 a.m. and the juries addressed the participants both in online and offline mode. In the project expo, **41 batches presented their ideas including 04 from the host institution**. In the forenoon session, 24 batches were screened and remaining batches were screened in the afternoon session. The valedictory session was conducted and the results were announced. 3 tracks viz. innovation Challenge, Maker Fair, Special tracks were conducted. Based on the recommendation of the juries, **Abstract ID 6116 is selected as I position and 6092 as II position**, Also the juries appreciated the teams **6138, 3201, 3109, 6129, 6101** for their work. Dr. M. G. Kavitha, HoD, Dept. CSE, University College of Engineering, Anna University, Pattukottai and Mr. P. Vinoth, Business Analytics Machine Learning, Indian Institute of Management, Tiruchirappalli acted as juries.



## 13. GATE Awareness

IEEE WIE AG organized a session on GATE Perspectives on 23.03.2024. Ms. N. Dhamayanthi, AP/CSE briefed on the Syllabus coverage preparing for examinations. Mr. K. S. Guru Swathik, PG Scholar, NIT Warangal, briefed on the various study materials to prepare for GATE. Also, he shared his experiences and challenges he faced during his preparation.



#### 14. Career Guidance Programme

Career Guidance Programme for the students of Pattukottai Polytechnic College, Pattukottai was organized on 25.03.2024. Dr. R. Saravanan, HOD/Civil briefed the students on the various career opportunities available in Government and Private Sector. Also, he briefed on the scope of higher education. Mr. M. Arun, AP/CSE gave a talk on the recent advances in Artificial Intelligence and Machine Learning.



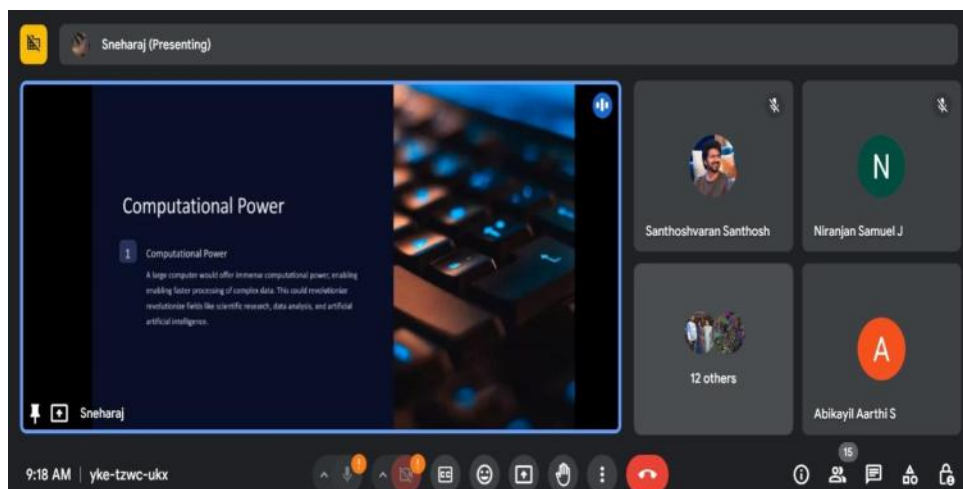
1. **Professional Development Session on Office Management**

Training and Placement Cell in association with IEEE STB 16621 organized a professional development session on **Office Management** on 04.04.2024. Dr. T. Devasenathipathi, OD Consultant, Mentor, Siddha Vedha University, Director, SR Tech Training Academy, Coimbatore delivered the lecture. In his lecture, he briefed on the various strategies for effective office management. Around 20 staff members participated in the programme and was coordinated by Dr. B. Suresh Babu, Placement Officer.



2. **IEEE Spectrum Talk on What if we build a really Big Computer**

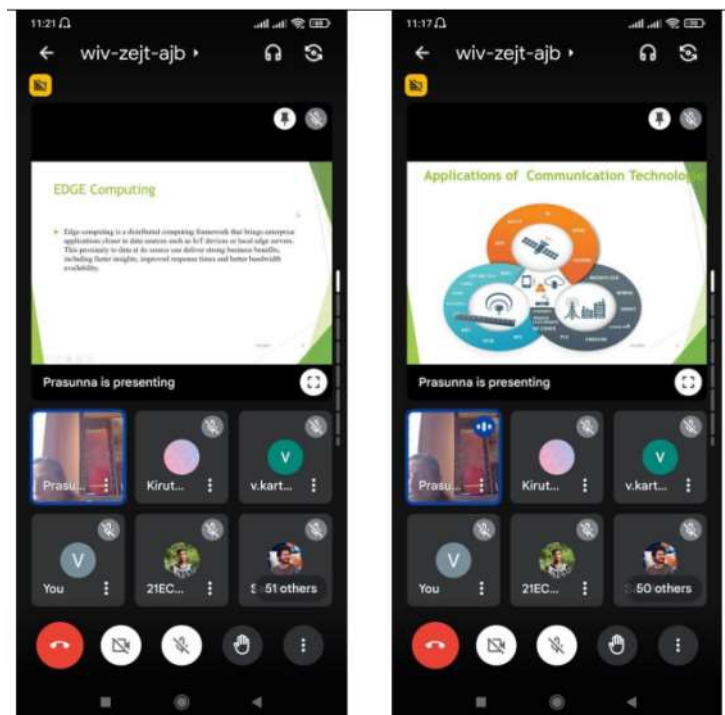
IEEE STB 16621 organized an IEEE Spectrum on **What if we build a really Big Computer** on 05.04.2024. Ms. Sneharaj, II year ECE student delivered the lecture. In her presentation, she explored the Impact of Building a Massive Computer. She also briefed on the 1. Computational Power, 2. Scientific Advancements, 3. AI Development, 4. Data Handling, 5. Energy and Environmental Impact. While concluding her lecture, she discussed the challenges & disadvantages and potential applications. The event was coordinated by student volunteers Mr. P. Jaya Prasad and Ms. D. Kiruthika of ECE department.





### 3. Webinar on Communication Technologies and its real time Applications using Edge Computing Technologies

Department of Electronics and Communication Engineering organized a webinar on Communication Technologies and its real time applications using Edge Computing Technologies on 09.04.2024. The resource person for the webinar was Dr. Vaddi Naga Padma Prasuna, Associate Professor, Atria Institute of Technology, Bangalore. Ms. D. Kiruthika, Student of II ECE and secretary - WIE SBA 16621, welcomed the resource person and the participants by the words. Mrs. D.Vennila, AP/ECE coordinator of this webinar gave the Introduction about the resource person. In her lecture, she explained about the various communication Technologies, The layered architecture of communication, Major communication protocols available, Edge computing technologies, Edge computing in real time applications etc. She emphasised the evolution of mobile networks and their characteristics. She gave an overview about the basic communication systems layered architecture, layered architecture protocols and compared the various protocols. 91 students participated in the programme and got benefitted.



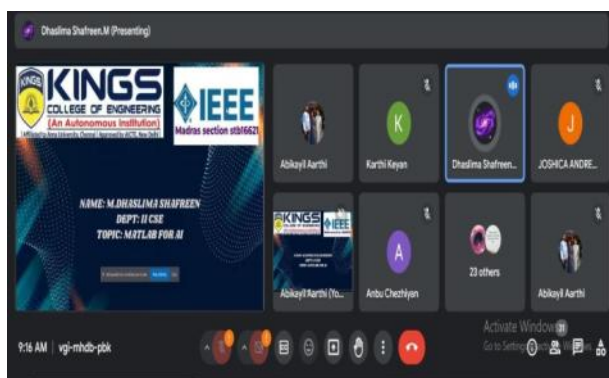
### 4. Internal Seminar on Solutions of soil Moisture Sensing with RFID for Landslide Monitoring

Department of Electronics and Communication Engineering organized an Internal Seminar on **Solutions of Soil Moisture Sensing with RFID for Landslide Monitoring** on 13.04.2024. Mr.R.Thandayuthapani, AP/ECE delivered the lecture. In his lecture, he briefed on the UHF RFID tags for soil moisture sensing and described the construction of the soil moisture sensor. Also he compared the results obtained from the two types of sensors.



## 5. Online Spectrum Talk on MATLAB for AI

IEEE STB 16621 organized an IEEE Spectrum talk on MATLAB for AI on 05.04.2024. Ms. M. DhaslimaShafreen, II year CSE student delivered the lecture. In her presentation, she gave an introduction to the MATLAB environment and briefed on AI fundamentals. Also she briefed the various stages in AI based data processing namely, Data Preprocessing, Model Training, Performance Evaluation, Deployment and Integration and Optimization Techniques. While concluding her lecture, he discussed MATLAB essentials, challenges and solutions, performance optimization and future of AI and MATLAB. The event was coordinated by E. Karthikeyan and P. Marimuthu of CSE Department.



## 6. Workshop on Emerging Techniques in Electrical Engineering

Department of EEE in association with IEEE STB 16621 organized a workshop on Emerging Techniques in Electrical Engineering was organized on 30.04.2024. **Dr.S.Sivakumar**, Vice Principal delivered the Inaugural Address. He emphasized that; this workshop will provide more knowledge about the various technical skills and the future scope for electrical engineers. He insisted the students to ask more doubts and have a clear idea about the emerging techniques in Electrical Engineering. Session 1 on the title “Emerging Technologies in Electrical Engineering” was handled by **Dr.S.Sivakumar**, Vice Principal. In his lecture, he briefed on the emerging technologies in electrical engineering which involve advancements in battery technologies, supercapacitors, and even innovative solutions like gravity-based

energy storage. Session 2 on the title “Witricity” was handled by **Dr.A.Prabha**, AP/EEE, KCE. In her lecture, she briefed that WiTricity's technology allows wireless transfer of power over distance via magnetic resonance. Alternating Current (AC) electricity runs through an electromagnetic coil within a charging station to form an oscillating electromagnetic field. Session 3 was hands- on-session on RES Laboratory and was handled by **Mr.J.Arokiaraj** AP/EEE, KCE. During the session, the participants were demonstrated about renewable energy sources. Session 4 on the title RES and EV for Optical EM of microgrids with the aim of co2 emission reduction was handled by **Dr.S.Naveen** Prakash, AP/EEE, KCE. In his lecture, he detailed the different review works on microgrids network and their main focuses. Also, he illustrated hybrid renewable energy-based MG optimization using graphical construction, probabilistic approach, iterative technique, artificial intelligence (AI), dynamic programming, and linear programming. While concluding he discussed the optimized framework of MG operation. A total of 71 students participated and got benefitted.



## 1. Two Day Techie Fest

Department of CSE in association with IEEE Student Branch organized two days Techie Fest on 02.05.2024 & 03.05.2024. On day 1, session on UI & UX design, WebApp Development and Building a Machine Learning Model was organized. On day 2, design contest such as Mini Project Expo, Logo Designing and Coding Skill was organized. 121 students participated in the event. Ms. D. Mangalambigai, Mr. M. Arun and Mr. S. Rajarajan were the coordinators of the programme.



## 2. International Conference on Recent Trends in Engineering and Science (ICRTES'24)

The International conference on “Recent Trends in Engineering and Science –ICRTES 2024” was held from 02-05-2024 to 03-05-2024. The function was graced by the Chief Guest, Dr. B. Subramanian, Senior Principal Scientist, Central Electrochemical Research Institute, Karaikudi. The Keynote Speaker of the function was Dr. M. Revanasiddappa, Professor, PES University, Bangaluru. The special invitee of the function was Dr. Sivakumar Subramanian, Associate Professor, Electronics Engineering, Universiti Teknikal Malaysia, Melaka. Dr. J. Arputha Vijaya Selvi, Principal, delivered the Welcome Address. She welcomed the gatherings with the words also she emphasized that, this kind of conference will provide the opportunity for the students community as well as the participants to listen to the talk from eminent speakers. Dr. R. Rajendran, Secretary, delivered the Presidential Address. The conference proceedings were released by the Chief Guest Dr. B. Subramanian. The chief guest, Dr. B. Subramanian, delivered the inaugural address. He detailed about the Electroplating Technology and its material characterization. The special invitee of the function was Dr. Sivakumar Subramanian, Associate Professor, Electronics Engineering, Universiti Teknikal Malaysia, Melaka, has delivered the invited talk on “IoT Technology for Disaster Mitigation”. The keynote address was given by Dr. M. Revanasiddappa, Professor, PES University, Bangaluru. Nearly 206 research articles were presented by the students, research scholars and faculty members from various reputed Institutions across India and abroad.



### 3. Kings Project Expo'24

Center for Promotion of Research in association with IEEE STB 16621 organized KINGS PROJECT EXPO' 2024 on 03.05.2024. This project expo aims to encourage the students' creativity and innovations on Engineering & Technology. Dr.S.Sabanayagam, CPR Member & Associate Professor / Mechanical Engineering, welcomed the gathering. Dr.J.Arputha Vijaya Selvi, Principal, inaugurated the expo and delivered the inaugural address. In her speech, she emphasized the significance of innovations in projects. Mr.J.Niranjan Samuel, JRF/R&D, introduced the chief guest Mr. M. I. Abdul Halik, Secretary of IEEE Madras Young Professionals, Chennai. In his address, he briefed on importance of IEEE membership and his IEEE membership journey. Also he shared his memories as Passion to Progress: My IEEE Member Experience. Dr. S. Sivakumar, Vice Principal, delivered the felicitation address. He insisted the students to enhance their technical knowledge both in software and hardware. The projects of internal and external students were evaluated by senior faculty members of every department nominated as jury's. Totally 70 batches participated in the project expo. Jury's evaluated the projects and gave feedback & valuable comments to the students. Based on the innovation, presentation, implementation and demonstration marks were awarded by the jury's. Two projects were selected for rewards from each department. The valedictory ceremony of the project expo started by 01:30 p.m. at Pallava Hall. Dr.R.Rajendran, Secretary of the college distributed the prizes and certificates to the participants. Project Expo came to an end with vote of thanks by Ms. S. Abikayil Aarthi, AP/CSE cum Event Coordinator – IEEE MAS YP and Secretary – IEEE STB 16621.



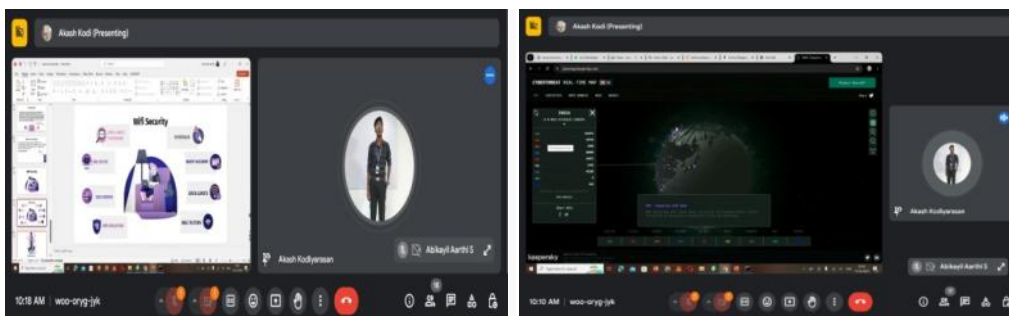
#### 4. Session on Passion to Progress : My IEEE Member Experience

IEEE STB organized a session titled **Passion to Progress: My IEEE Member Experience** on 03.05.2024. Mr. M. I. Abdul Halik, Secretary of IEEE Madras Young Professionals, Chennai shared how IEEE membership for their career. Also he shared his experience, how IEEE membership was useful to him, how it helped to excel in his career. IEEE Student branch members participated in the session.



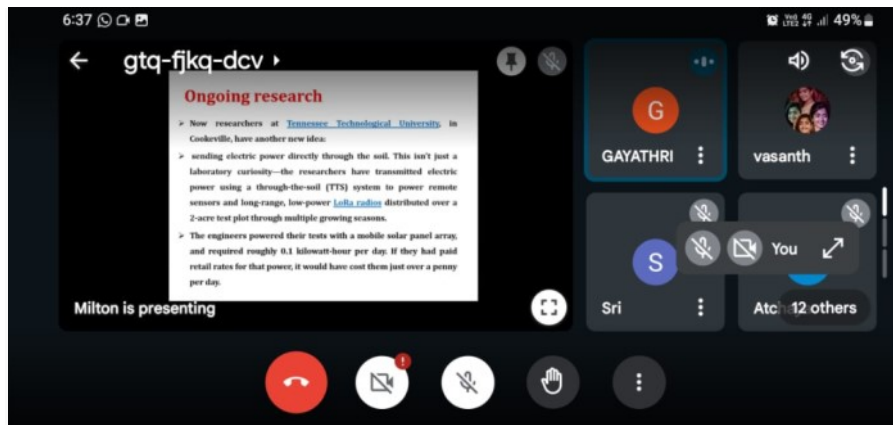
#### 5. Two Days Workshop on Cyber Security : Safeguard your Digital World

The two days workshop on “Cyber Security: Safeguard Your Digital World” was organized on 11.05.2024 & 12.05.2024, aimed to celebrate National Technology Day at educating participants about the fundamentals and advanced aspects of cyber security. On Day 1, Fundamentals of Cyber security with Interactive Session: Case Studies and on day 2, Advanced Cyber Security Practices were covered. At the end of the session, Q&A and Expert Panel Discussion were organized. The workshop was attended by 65 participants from various sectors including corporate, education, and government. The sessions were led by cyber security experts, providing comprehensive insights into protecting digital assets and enhancing overall cyber security posture.



#### 6. Online Spectrum Talk on Power Sensor for Agricultural IoT System

IEEE STB 16621 organized Online Spectrum Talk on Power Sensor for Agricultural IoT System on 24.05.2024. **Ms. K.C. GAYATHRI, III EEE**, delivered lecture. In her lecture, she briefed on the Evolution of IOT in agricultural system, role of IoT in agricultural systems, key milestones and developments and the ongoing research work. Also she briefed on the, design of Agricultural IoT System. While concluding her lecture, she briefed on the future scope of IoT in Agricultural systems.



## 7. Webinar on How to Write a Grant Proposal in an Effective Manner

Webinar titled "How to Write a Grant Proposal in an Effective Manner" was conducted on 31.05.2024. The session was organised by department of CSE in association with Centre for Promotion of Research & IEEE STB 16621. **Mr. M. Logeshwaran, Trainer, IGNZEE Software Solutions** was the resource person. The following topics were covered during the session, Introduction to Grant Proposals, Preparing to Write, Components of a Grant Proposal, Writing Tips and Strategies, Review and Submission. At the end, Q&A Session was organized and participants clarified their doubts with the resource person. The webinar attracted 62 participants. The session aimed to equip attendees with the skills and knowledge required to craft compelling grant proposals.




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Approved by Anna University, Chennai. Established in 2011, 2012

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING  
 in association with  
**R&D SECTION**  
 Proudly Presents  
 Webinar on  
**"HOW TO WRITE A GRANT PROPOSAL IN AN EFFECTIVE MANNER"**  
 31.05.2024

**GUEST SPEAKER**  
**MR.M. LOGESHWARAN**  
 TRAINER  
 IGNZEE SOFTWARE SOLUTIONS

connect us meeting link through : <https://shorturl.at/RKS9Q>

<b>Student Volunteers</b> G. Rasika M.Daslima Shafreen II Year CSE	<b>Co-ordinator</b> Ms.S. Abikayil Aarthi, AP/ CSE Ms.N. Dhamayandhi, AP/ CSE
<b>Convenor</b> Dr. S.M.Uma, Prof Head of the Department / CSE	<b>Principal</b> Dr. J. Arputha Vijaya Selvi IEEE SBC - 16621

