A Brief Report

On

Two Day Workshop on

"Incorporating the Coding with Emerging Technologies in Industry"

26th to 27th August 2022

Sponsored by

IEEE R10 EAC, Photonics, Robotics & Automation, Electron Device Society

Organized by

SAVEETHA ENGINEERING COLLEGE IEEE STUDENT BRANCH

CHENNAI

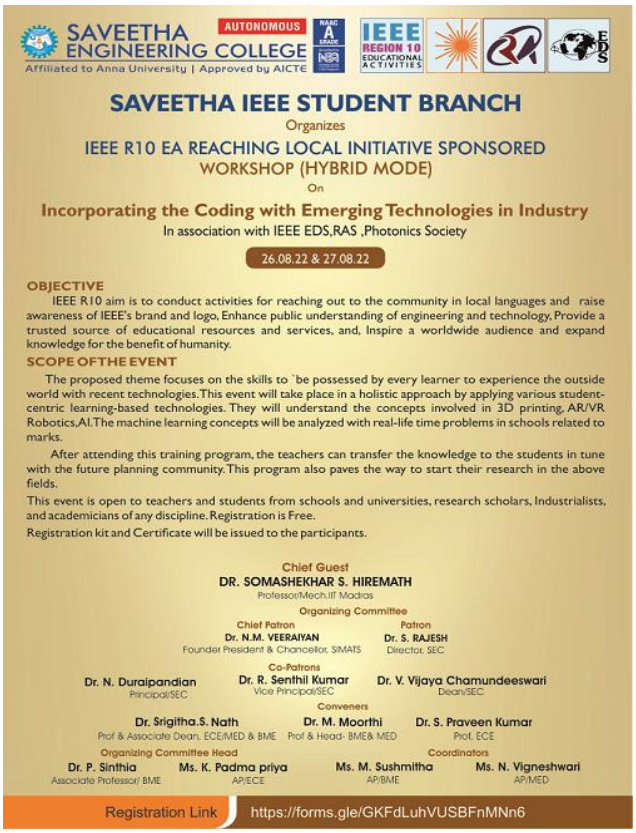
OBJECTIVE

IEEE R10 aim is to conduct activities for reaching out to the community in local languages and raise awareness of IEEE's brand and logo, Enhance public understanding of engineering and technology, Provide a trusted source of educational resources and services, and, Inspire a worldwide audience and expand knowledge for the benefit of humanity.

SCOPE OF THE EVENT

The proposed theme focuses on the skills to be possessed by every learner to experience the outside world with recent technologies. This event will take place in a holistic approach by applying various student-centric learning-based technologies. They will understand the concepts involved in 3D printing, AR/VR ,Robotics, AI. The machine learning concepts will be analyzed with real-life time problems in schools related to marks. After attending this training program, the teachers can transfer the knowledge to the students in tune with the future planning community. This program also paves the way to start their research in the above fields. This event is open to teachers and students from schools and universities, research scholars, Industrialists, and academicians of any discipline.

Event Brochure:



Inaugural Function Invitation:

IEEE BANNER

Day 1 - 26/08/2022 (Friday) FN- Inaugural Function:

The Department of Medical Electronics, Electronics and Communication Engineering and Biomedical Engineering from Saveetha Engineering College, Chennai have successfully organized two day Workshop on "IEEE R 10 Reaching Initiative Local Sponsored Workshop on Incorporating the Coding with Emerging Technologies in Industry ", during 26th and 29th August 2022. The Inaugural function for IEEE Workshop began with a formal welcome by **Ms. A.Rasheetha ,** Assistant Professor (OG) in the Department of Bio Medical Engineering. The function was inaugurated with an Invocation song of Tamil Thaai Valzhthu, followed by lighting ceremony of Kuthuvilakku.

The Welcome address was delivered by **Dr. Srigitha S Nath**, Professor and Associate Dean, Saveetha Engineering College. She extended a warm welcome to the chief guests of the Inaugural function, **Dr. Somashekhar S. Hiremath**. She also thanked the management of Saveetha Engineering College for their constant support and encouragement in organizing such events. She wished the event a grant success and thanked the participants for their joining the programme.

Dr.N.Duraipandiyan, Principal, Saveetha Engineering College, has delivered the Presidential address. He focused upon the importance of such wonderful workshops for students and faculty in the present days. He also emphasized the need to deal with the rapid changes and shifting paradigms in the education field. He also wished the organizers for taking up the responsibility in organizing such event and insisted that the event should be made as interactive as possible.

The Vice principal's address was given by our beloved vice principal **Dr. R.Sendhil kumar,** Vice Principal, Saveetha Engineering college**.** He specified the importance of the Medical industry with the some strong examples in the industry 4.0. He also explained the need of the society and students need to work focusing on that by enhancing their skills in various aspects.

The special address was given by **Dr. Vijaya chamundeshwari, Dean, Saveetha Engineering College**. She appreciated our HoD Dr. Moorthi, for taking such nice and valuable efforts for organising these kinds of events. She also quoted that how students need to make use of these events so that it could pave the way for achieving their goals in an easier way.The chief guest was then felicitated with a memento and bouquet as a token of appreciation.

Dr.M.Moorthi, HoD given the introduction about the chief guest. He pointed out the milestones and achievements of the chief guest in various aspects. He also explained the importance of Industry 4.0 and hww Artificial Intelligence is ruling the medical field today.

The Keynote address was delivered by the chief guest, **Dr. Somashekhar S. Hiremath, Department of Mechanical Engineering, Indian Institute of Technology Madras, Chennai**. He delivered an exceptional talk on the recent advancements in the medical device design industry. He also showed various device prototypes development in various IITs across the country. He encouraged the student community to design their own medical device prototypes for the various problems faced in the society. He also explained what are all the challenges that a person can meet in Industry 4.0 and how to overcome it by sorting out tips.

Nearly 150 participants have registered from various schools and colleges. Schools such as Velammal Vidhyashram, Grace Academy etc., Colleges such as Sathyabama Institute, Rajalakshmi Institutions, Agni college of Engineering, Panimalar Institutions, SSN College of Engineering and Technology, etc., Everyone showed their active participation and we also received great feedback from the externals. The Inaugural function ended with the release of the IEEE News Letter as souvenir.

IEEE Newsletter Release:

Screenshots from the Inaugural function are attached below:

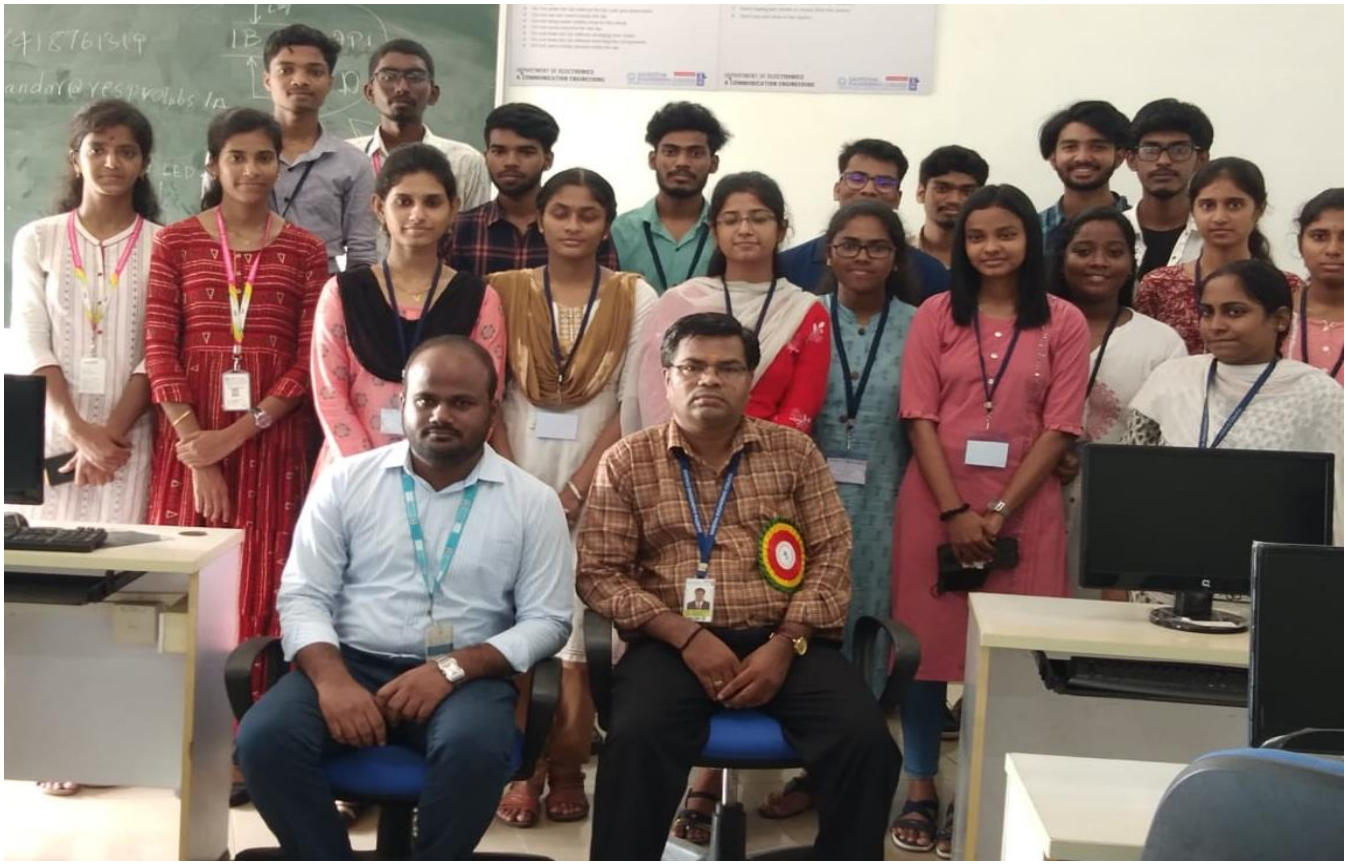
SAVEETHA IEEE STUDENT BRANCH
Cordially invite you all for the Inauguration of
IEEE R10 EA TRY ENGINEERING AND STEM &
REACHING LOCAL INITIATIVE SPONSORED WORKSHOP

SAVEETHA IEEE STUDENT BRANCH
Cordially invite you all for the Inauguration of

Day 1 - 26/08/2022 (Friday) FN & AN Session

93 Participants from various institutions registered and participated in day 1 forenoon and afternoon session. **Er.M.Balachandar,** R&D Head, ResPro Labs,Chennai, delivered a talk on "Introduction and application of Intel Node MCU in IoT" followed by Hands On Training in the following area Basics in Intel Edison development board(Working with Analog and Digital pin),IOT with Intel Edison, Google assistant With Node MCU.

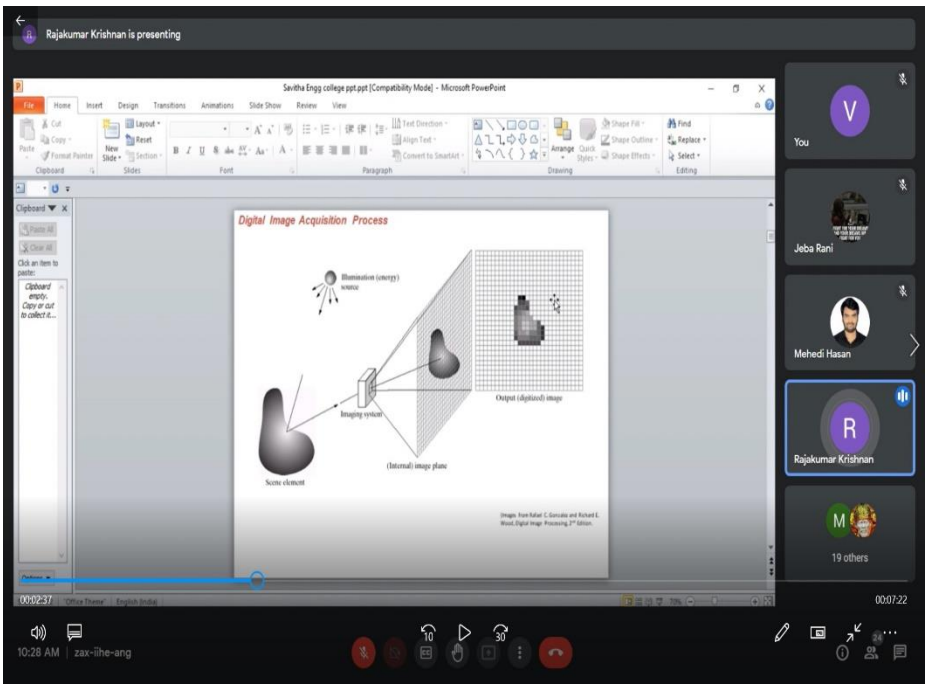
Screenshots are attached below

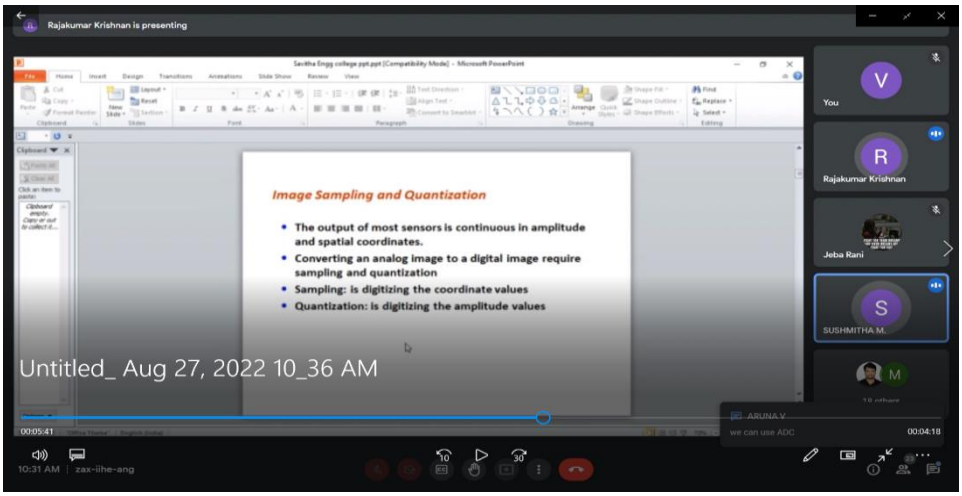


Day 2 - 27/08/2022 (Saturday) FN Session

Dr.K. Rajkumar, Associate Professor, School of Computer science, VIT, Vellore, has elaborated the **Day 2 Forenoon session** with all the fundamentals and basics of Digital image processing. He also explained all the important and interesting details about the projects related to the topic and how students can contribute to it in an effective way. He also explained some examples of the challenges in the medical industry related to the digital image processing. Students raised their questions and clarified with excellent solutions regarding the topic.

Screenshots are attached below

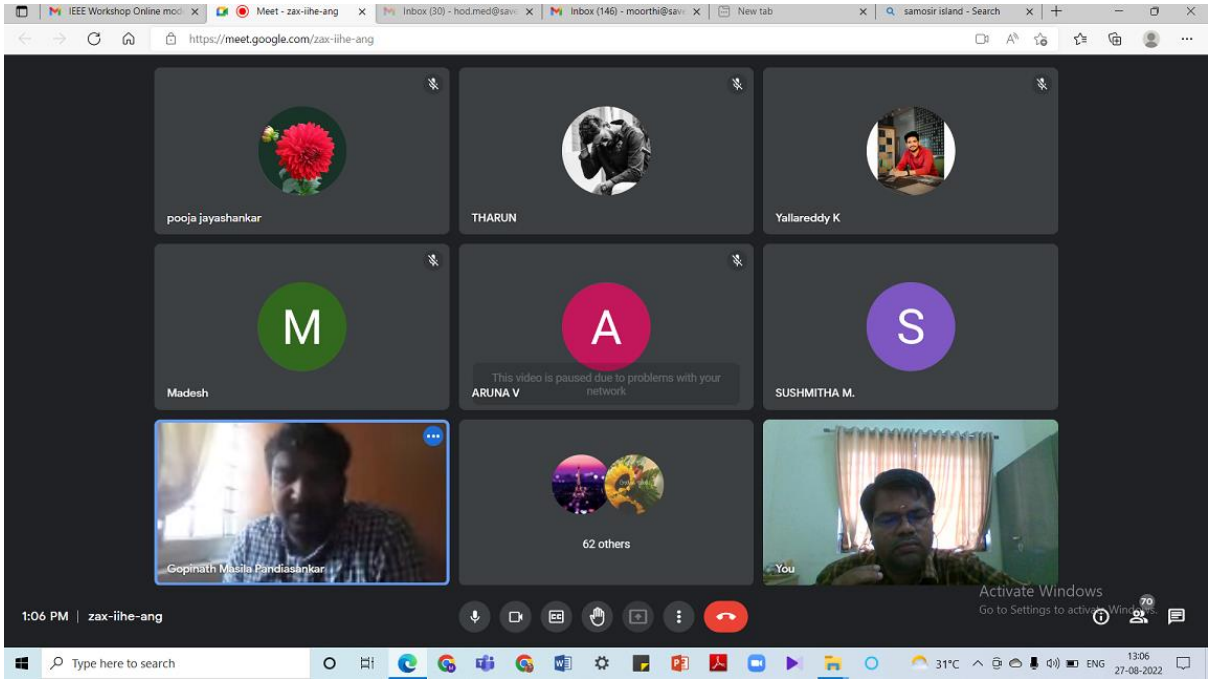


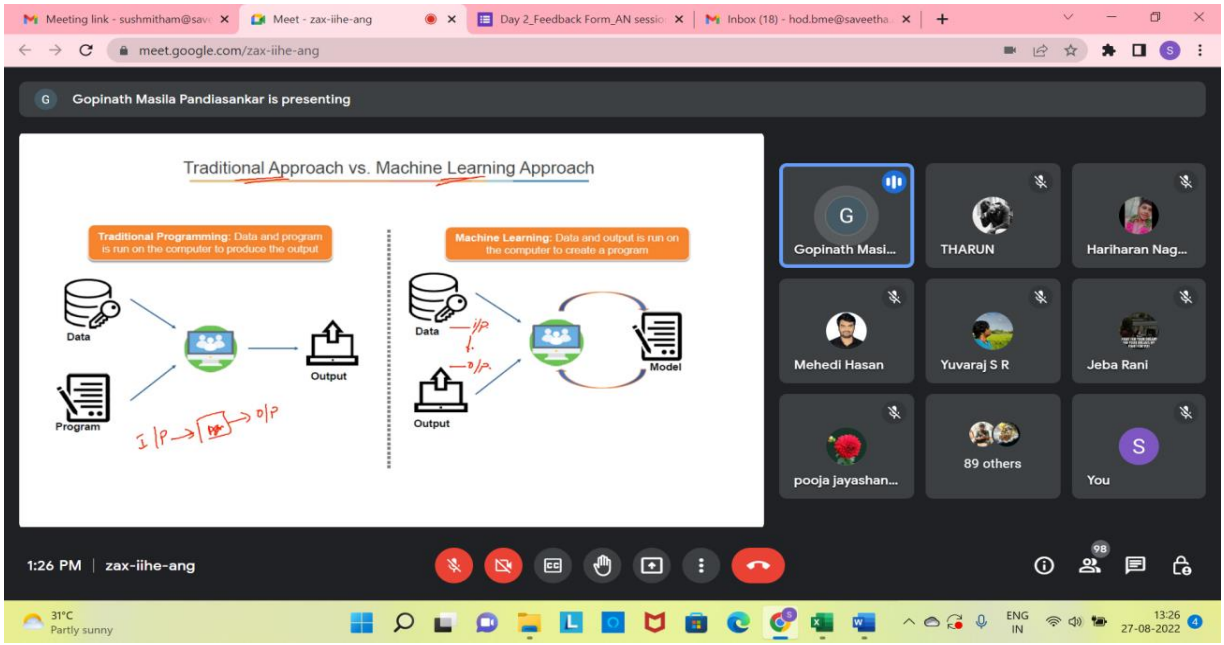


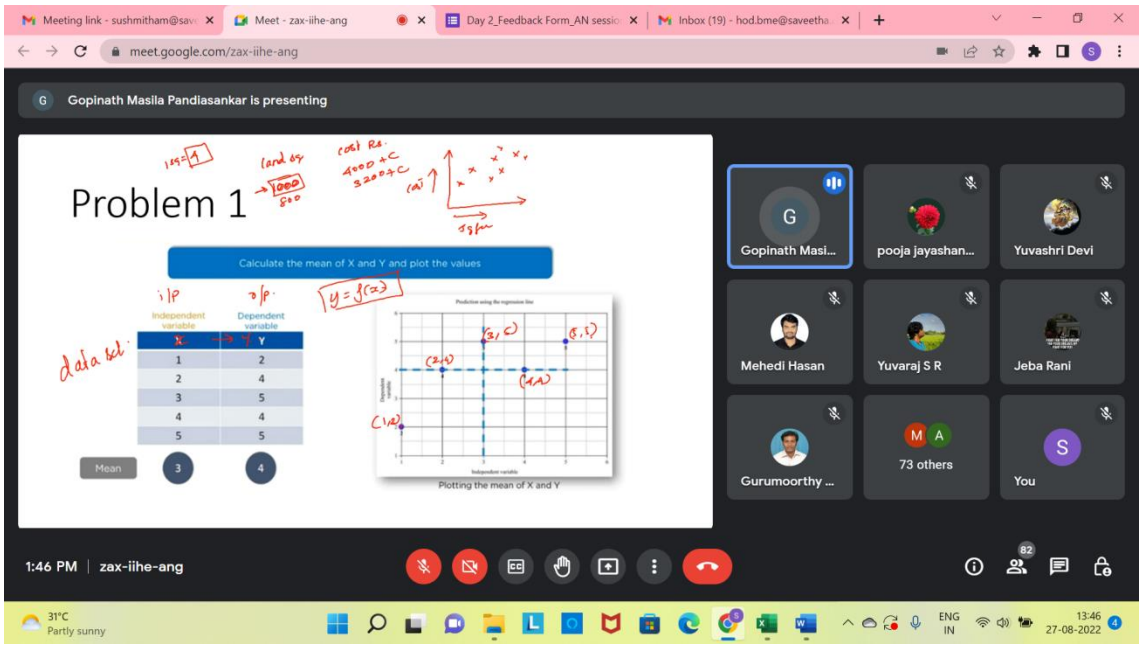
Day 2 - 27/08/2022 (Saturday) AN Session

Dr.M.Gopinath Associate Professor, School of Computer science, VIT, Vellore , gave a brief introduction to the applications of AIML in the automation field. He explained the differences between the traditional approach and the machine learning approach to solve major problems. He also explained the various machine learning techniques. The basics of supervised and unsupervised learning were thoroughly explained.

Screenshots are attached below







Outcomes:

At the end of this workshop, the participants

1. Understood the concepts involved in 3D printing, AR/VR , Robotics, and AI.
2. Analyzed the machine learning concepts with real-life time problems in schools related to marks.