

## **REGION 10 CONNECT**

Volume 25 | Issue 3 | July 2024

#### **HEADLINES>**

#### **IEEE R10 Director's Message**

April started with the signing MOU between IEEE Singapore Section and HTX (Home Team Science & Technology Agency) of Singapore. Page 2

#### Industry Day 2024 - Series 2

On 16 April 2024, coinciding with 2024-International Conference on Communication, computing, and Internet of Things (IC3IoT-2024), at Chennai, an IEEE R10 Industry Day and Industry Round Table Discussion was held. Page 13

#### **IEEE R10 Conference Quality and Management Workshop**

IEEE Bangalore Section organized a one-day IEEE Region 10 Conference Quality and Management Workshop on 22 June 2024 at Dayananda Sagar College of Engineering, Bengaluru, India. Page 13.

#### **IEEE R10 WIE - Industry Forum** 2024

On 14 May 2024, the R10 WIE Committee hosted the IEEE R10 Women in Engineering - Industry Forum 2024. Page 6



#### **FEATURE FOCUS>**

#### **IEEE R10-140 Initiative:** Healthy Bodies, Healthy Mind

IEEE

IEEE celebrates its 140th Anniversary, IEEE R10 is celebrating

milestone with an initiative members/public towards healthier living. Page 6

#### **Call for Applications: IEEE MGA Individual Awards - 2024**

Nominate a college before 15 September 2024! Page 19

**CLICK HERE** 

#### SPOTLIGHT>



**IEEE R10 SYWL Congress 2024** "Collaborative Leadership beyond various boundaries"

#### **IEEE R10 SYWL CONGRESS 2024**

The bi-annual IEEE R10 SYWL Congress will be held from August 29 to September 1, 2024, at the National Olympic Memorial Youth Center in Tokyo, Japan. Over 250 participants, including more than 100 international attendees, are expected to join the congress. Page 5

**IEEE R10 Young Professionals Career and Leadership Aid Program** 

IEEE R10 **Robotics Competition Final Rounds** 

29 August 2024

30 August 2024

Tokyo, Japan

#### **IEEE R10 DIRECTOR'S MESSAGE**

#### Dear Members of IEEE R10, how have your months of April and May been?

Me and on behalf of R10? - Busy, Fruitful and Impactful!

Contd from Page 1.

HTX is a statutory board under the Ministry of Home Affairs of Singapore with the vision, "Exponentially impacting Singapore's Safety and Security". We ran a joint event on "HTX-IEEE Public Safety Technologies Workshop: From Research to Real-world Applications" and the pool of researchers in HTX will have great potential and opportunities to participate and contribute towards the vision and mission of IEEE as members. This was only made possible with the initiation by Dr. Jonathan Pan, Chief of Disruptive Technologies Office and Director of xCybersecurity of HTX.

The inaugural IEEE Life Member Conference was held at Austin, Texas from 14-16 April 2024. The theme being "Evolution: Technology, Applications and Contributions", with a series of workshops, keynotes, and technical tours packed in the three days. Conference Chair, Mike Andrews and the team of volunteers have done a great job developing the program with appropriate topics, and expert speakers who are inspiring and informative. Total IEEE Life Members are around 38,000 with 162 Life Member Affinity Groups (LMAG). There are nearly 3,000 Life Members in R10 and the sector is growing. There is a clear need for events such as conferences to focus on technologies to maintain wellness and serve the aged population. A proposal is suggested for a new R10/R11 flagship conference on the theme of "Technologies for Wellness and Safety" starting in 2026.

After the LM Conference, the 2024 MGA Meeting series was held in San Antonio from 18-21 April. The meeting series provided opportunities for members of all IEEE MGA committees to gather together for reports, discussion as well as networking. This provided all delegates with a good overview of MGA's operations, priorities, and future plans.

The month of May started with the 2024 IEEE Vision, Innovation Challenges (VIC) Summit and Honors Ceremony in Boston, USA.

The 2024 IEEE Medal of Honor Recipient is Robert E. Kahn for his "pioneering technical and leadership contributions in packet communication technologies and foundations of the Internet." The full list of award recipients is available at <u>Corporate Awards</u>. It is worth noting that 2025 will be held in Tokyo, Japan – in Region 10!

Following IEEE VIC Summit, IEEE President Tom Coughlin attended the IEEE R10 WIE-Industry Forum, hosted by TVRI (TV Republic of Indonesia). The three-hour broadcast featured leading representatives from industry around the region, R10 WIE Affinity Groups, and IEEE leaders.



Members of 2024 IEEE R10 at Strategic Planning and Operation Committee meeting at Royal Pacific Hotel, Hong Kong on 25th and 26th May, 2024.



Visit to HK Science and Technology Park, Robotic Catalysing Centre on 28th May, 2024 (L to R) Zia Ahmed, (R10 VC Professional Activities), Deepak Mathur (IEEE VP MGA), Kevin Hing (Vice Chair, HK Section), Hwa Chiang Leo (Director, IEEE Asia Pacific Office), Nia (IEEE R10 Treasurer), Lance Fung and Ookii (IEEE R10 Director), R. Jadeja (R10 VC, Member Activities), Jeff Tang (Treasurer, HK Section), Jean Lai (Secretary, HK Section) and Felix Yu (Senior Manager, Incubation and Acceleration Programmes, HKSTP)



At Tech Sumit (from L to R) Varin Khera, (co-founder and Executive VP CloudsSec Asia), Celia Desmond (IEEE Industry), Agnes Irwanti (IEEE R10 WIE Chair), Takako Hashimoto (R10 Director-Elect), Lance Fung (R10 Director), and Bernard Lim (R10 AdHoc on Industry Engagement and Roubdtables)

#### **IEEE R10 DIRECTOR'S MESSAGE (CTD.)**

Contd from Page 2.

The recording is available at <u>YouTube</u>. IEEE R10 WIE Chair, Dr Agnes Irwanti has put in great efforts and valuable resources to make the event a great success. Delegates are most appreciative of her contributions towards IEEE R10, WIE, and local industries.

R10 Operation Committee held the Strategic Planning and OpCom meetings in Hong Kong on 25 -26 May. This was followed by a meeting with volunteers and leaders of the Hong Kong (HK) Section on 26 May, and a meeting with leaders from China and Macau Sections at Macau on 27 May. The last day was dedicated to a visit to the Hong Kong Science and Technology Park (HKSTP).

We were given an overview of their programs https://www.hkstp.org/en/programmes on Ideation, Incubation, and Incu-Bio, Acceleration, and Elite. It is worth noting that they provide funding and support from HK\$100,000 to HK\$21.5 million! They present tremendous opportunities for entrepreneurs among IEEE members who have the right ideas, products, and plans! The visit concluded with a visit to the Robotics Catalysing Centre, with a presentation of the R10 Robotic Competition by R10 Vice Chair, Dr Zia Ahmed. The few days of visits and meetings have been productive and we acknowledge and thank the Officers in the HK Section (Ray Cheung, Chair; Kevin Hung, Vice Chair; Jeff Tang, Treasurer and Jean Lai Secretary) for their hospitality and excellent arrangements in Hong Kong; and to Prof Xiaodong Li, Chair and Calvin Ho, Vice Chair for hosting the event at Macau University of Science and Technology (MUST). Members of R10 OpCom are very satisfied with the visit and we look forward to holding further events in the next two years in Hong Kong and Macau, to network and collaborate with local volunteers for future projects and events.

"So, what'll happen in the coming months?", you may ask. The answers are: Board of Directors meeting, R10 Nomination and Advisory Committee meeting, Visit to Sections in India, IEEE Convene, SYWL, TENSYMP, R10 HTC... I will keep you posted....

Happy August!!



Lance Fung
IEEE R10 Director 2023-2024





Meeting volunteers and leaders from HK Section at HK City University (CityU) on 26th May, 2024.



Meeting Volunteers from China, Macau and HK Sections at Macau University of Science and Technology (MUST) on 27th May, 2024.



#### **IEEE 2024 VIC SUMMIT AND HONORS CEREMONY**

#### Takako Hashimoto, IEEE R10 Director-Elect

The 2024 IEEE Vision, Innovation, and Challenges (VIC) Summit and Honors Ceremony was held on 3 May 2024, at Encore Boston Harbor Hotel. This prestigious event celebrated significant achievements in engineering, science, and technology, emphasizing the IEEE's mission to advance technological innovation for the benefit of humanity. The event drew over 400 attendees, including 172 members, 49 student members, 21 award recipients, and participants from 23 countries.

The VIC Summit and Honors Ceremony aims to recognize and honor individuals and teams who have made substantial contributions to engineering and technology. These awards are among the highest recognitions bestowed by IEEE, highlighting the exceptional achievements of professionals who have made a lasting impact on technology and society. By fostering a platform for knowledge sharing, networking, and collaboration, the event promotes the advancement of IEEE's mission and encourages global cooperation in technological innovation.



Welcome Reception at Akamai HQ

The event began with a welcome reception hosted by Akamai Technologies on 2 May 2024. Participants were engaged in an evening of innovation and networking reception setting the stage for the following day's activities, providing an opportunity for informal discussions and connections.

The second day featured four-panel sessions covering various technological advancements and industry trends. Exhibitions were set up by sponsors and partners, with Boston Dynamics' dog robot being a major attraction. Photos of award recipients and the IEEE ceremonial board were displayed in the hotel lobby, allowing attendees to celebrate the honorees.



Revealing of VIC Summit 2025 in Tokyo

The Honors Ceremony Gala was a key highlight, featuring a red-carpet reception followed by dinner and a dessert reception sponsored by Regions 1 and 2 and the Boston Section. The event recognized several distinguished individuals and organizations for their exceptional contributions, including:

- Robert E. Kahn: 2024 IEEE Medal of Honor for contributions to network protocols and the development of the internet.
- Mainspring Energy: 2024 IEEE Spectrum Emerging Technology Award for innovative energy solutions.
- Advanced Micro Devices, Inc. (AMD): 2024 IEEE Corporate Innovation Award for advancements in chipset architecture designs.
- Sung Wook Park: 2024 IEEE Honorary Membership Award for expanding the influence of technology in the semiconductor industry.
- Stefan G. Mozar: 2024 IEEE Richard M. Emberson Award for leadership in IEEE Societies and technical communities.
- Tariq S. Durrani: 2024 IEEE Haraden Pratt Award for contributions to education, technical activities, and global connections within IEEE.
- Prof. Fumio Koyama: IEEE Nick Holonyak Jr. Medal for Semiconductor Optoelectronic Technologies.

The announcement of the 2025 VIC Summit to be held in Japan was made at the Honors Ceremony Gala. This upcoming event will highlight the need for substantial cooperation from Japanese volunteers and staff, continuing the tradition of celebrating excellence and fostering global collaboration in engineering and technology.

The success of the 2024 VIC Summit and Honors Ceremony was made possible by the support of 15 sponsors and partners, emphasizing IEEE's commitment to recognizing and promoting technological innovation and excellence. The event not only celebrated individual achievements but also highlighted the importance of diversity, inclusion, and global collaboration in advancing technological innovation.

Moving forward, we aim to increase the number of award recipients from IEEE R10 and elevate R10's presence within IEEE. By encouraging and supporting more nominations from R10, we hope to showcase the exceptional talent and contributions from the region on a global stage.

For more details on the event and the award recipients, visit the <u>IEEE Awards website</u>.

Region 1

Tokyo, Japan

#### **IEEE R10 SYWL CONGRESS - JAPAN 2024**

#### Hidenobu Harasaki, General Chair, SYWL 2024

Contd. from Page 1.

IEEE R10 Students, Young Professionals, Women In Engineering and Life Members (SYWL) Congress is a biannual event of IEEE R10. The event aims to foster volunteer leadership and facilitates networking among participants from different corners of the Region.

This year, the event will be held from August 29 through September 1 at the National Olympic Memorial Youth Center, which is located at the center of Tokyo, Japan.

This year's theme is "Collaborative Leadership beyond Various Boundaries." More than 350 participants have registered for the event and congress expects about 200 participants from outside of Japan.

#### Keynote speakers of the IEEE R10 SYWL Congress 2024



Dr. Thomas Coughlin **IEEE President** 



Prof. Kathleen Kramer IEEE President-Elect

#### Satellite workshops at the SYWL Congress

IEEE R10 Young Professionals (YP) Career and Leadership Aid Program (CLAP)



August 29 at the same venue

IEEE Japan Council Student Branch Leadership Training Workshop

August 29 at the same venue

**IEEE R10 Robotics Competition Final** Stage

August 30 at Meiji University near the venue

IEEE Tokyo Section Industry Engagement Workshop

August 31 at the same venue

Every evening, the participants will get the opportunity to network at events such as Welcome Reception (August 29), Award Night (August 30), and Cultural Night (August 31).

TIEEE R10 SYWL 2024 will create a platform to learn collaborative leadership beyond boundaries such as gender, ethical background, culture, religion, and geographical Region/Country/Section differences.

Share your volunteering experiences and boost your

visibility by submitting an article to the R10 Newsletter, where your story can inspire and engage a wide audience!

We look forward to seeing you in Tokyo!

Call for Articles!!

#### **IEEE Region 10 Newsletter Committee 2024**



Chair Dr. Akila Wijetunge

**Managing Editors** 



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Yamada





Saiani Mayadunne

Web & Design Leads



Charindu

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Balagalla



Akarsh Ashok

Web & Design Sub-committee





Akshay Shaii

#### Article submission deadline 15 September, 2024

Facebook in LinkedIn





r10-ecn@ieee.org

Connect!

Submit here!!

**R10 Newsletter** October 2024 Issue

#### IEEE R10 WIE - INDUSTRY FORUM 2024

#### Agnes Irwanti, Chair, IEEE R10 WIE Committee

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The theme for the event was "Shaping the Future: Women's Role in Industry". It brought together professionals and women leaders from various industries alongside IEEE leaders for a roundtable discussion at TVRI, highlighting the crucial role of gender diversity in engineering and technology. This gathering provided a pivotal platform for experts to exchange experiences, insights, and expertise on the challenges faced by women in male-dominated fields. Central to the dialogue was a collective call for organizations to foster inclusive environments that champion gender diversity. Speakers emphasized the importance mentorship, networking, and sponsorship initiatives in advancing women's professional growth while advocating for workplace gender equality and equitable opportunities. The discussions at the forum also highlighted the critical role of encouraging girls to pursue STEM education to pave the way for a more inclusive and equitable future for women in engineering and technology.

Furthermore, this forum highlights the imperative to cultivate a diverse and inclusive media environment. They advocated for proactive support from all stakeholders to narrow the gender disparity gap and create opportunities for women to make meaningful contributions to the industry. The event also featured addresses from distinguished dignitaries, including a keynote speech by Tom Coughlin, IEEE President, Dr. L.T. Handoko, Chairperson of the National Research and Innovation Agency Republic of Indonesia, Ms. Mira Tayyiba, Secretary General for the Ministry of Communications and Informatics of the Republic of Indonesia, and, Lena Maryana, Indonesia LBBP Ambassador of State of Kuwait, HE. Additionally, panel discussions included contributions from Kerala Section WIE AG, Bangladesh Section WIE AG, Bangalore Section WIE AG, Malaysia Section WIE AG, Lahore Section WIE AG, Uttar Pradesh Section WIE AG, Islamabad Section WIE AG, Hyderabad Section WIE AG, Kolkata Section WIE AG, and Sri Lanka Section WIE AG who participated online. Their presence underscored the importance of advancing gender equity and inclusion in STEM and industry, setting the stage for substantive and impactful deliberations.



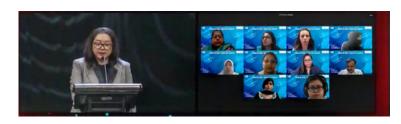






IEEE Leaders sharing their views on the discussion

The IEEE R10 Women in Engineering - Industry Forum 2024 served as a platform for in-depth and insightful discussions on the challenges and opportunities for women in engineering and technology. The collective voice of the professionals and the support from industry leaders emphasized the importance of creating a more inclusive and equitable future for women in these fields, paving the way for positive change and progress. The entire event is available for viewing on YouTube.



Virtual Discussion with ten R10 WIE Affinity Group Chairs

## IEEE R10-140 INITIATIVE: HEALTHY BODIES, HEALTHY MINDS

Vijay Paul, Chair. IEEE R10 Information Management Committee

Contd from Page 1.

<u>R10-140</u> is a region-wide health and wellness campaign to motivate IEEE members, volunteers, and the community, to get mobile and improve their fitness. Through this campaign, participants are encouraged to cover the equivalent of 140km (or its multiples), either individually or as a team, to take the top spot in individual, team, or region-wide leaders league.

Any activity - walking, running, sports, gardening, household work - will be converted into kilometers covered.

Launched on 1 June 2024, the project will be on for 6 months - until 30 November. With 150+ members from across 25+ countries, the campaign is already on roll!

So, what are you waiting for?

#### Click here to Get up and get moving!

- Project Mentors: Emeritus Prof. Lance Fung, Hwa Chiang Leo, Dr Preeti Bajaj
- Project Lead: Vijay S Paul
- Technical Lead: Akarsh Ashok
- Lead Developers: Akhil Gireesh, Amelsha B, Harikrishna A, Jerry Sanju Joanes, Muhammed Ajmal KA, Shijin Abraham

## 2024 IEEE R10 EAC AND IEEE CIS EDUCATION PORTAL ACTIVITIES

A Sandbox for Teaching and Learning in CI for Pre-University and Undergraduate Students Chang-Shing Lee, Mei-Hui Wang, Mohd Hafiz Ismail, Chi-Un Lei, and Ray C. C. Cheung

The pilot project, A Sandbox for Experience and Learning in Quantum Computational Intelligence (QCI) for Pre-University and Undergraduate Students, began in 2023 with support from the IEEE Computational Intelligence Society (CIS) and the IEEE Region 10 Educational Activities Committee (IEEE R10 EAC). Throughout the year 2023, we held training sessions in Taiwan, Hong Kong, Tokyo, South Korea, and the US. The success of these sessions led to a collaboration with the National University of Tainan (NUTN), Taiwan, and various other organizations, including the IEEE R10 EAC, IEEE CIS, and several IEEE Sections and Chapters across Asia, such as the IEEE Hong Kong Section, IEEE Taipei/Tainan Section, IEEE Malaysia Section, IEEE SMCS Japan Chapter, and local student branches like CityU Student Branch and Google Developer Student Clubs at Tokyo Metropolitan University (TMU). This collaboration aimed to advance educational initiatives in QCI and resulted in a project proposal submitted to the IEEE R10 Strategic Planning & New Initiatives Committee (SPNIC). The proposal received formal approval and funding from IEEE R10 in early November 2023 for three consecutive years.

On 30 March 2024, a hybrid event organized by the IEEE Malaysia Section, Universiti Malaysia Perlis, and the IEEE R10 EAC at Tech Dome Penang, Malaysia, attracted 75 professionals, students, and teachers, both in-person and online. A follow-up on-site event took place on 13 April 2024 at the City University of Hong Kong, organized by the IEEE Hong Kong Section and the IEEE R10 EAC. It was attended by 15 participants, with four additional attendees joining online from the NUTN.



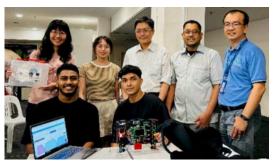
Organizers and Trainers - April 13, 2024.

The events aimed to enhance understanding of QCI technologies and their role in technological advancement, aspiring to energize global tech education and develop passionate young scholars in QCI. In the opening remarks of the event, experts and scholars from different countries highlighted the importance of this initiative in advancing QCI education, including William Khoo Boo Wooi (Chief Executive Officer, Tech Dome Penang), Nordin Ramli (IEEE Malaysia Section Chair), Takako Hashimoto (IEEE R10 SPNIC Chair), and Chun Che Lance Fung (IEEE R10 Director).

Notable presentations at the 30 March 2024 event in Malaysia included Marek Reformat on Fuzzy Systems, Markus Wagner on Evolutionary Computation, and Chang-Shing Lee demonstrating a CAO robot for co-learning between humans and machines.

The QCI Experience-based & Operation-based Learning session included three topics: Travel Recommendations, QCI Agent & GAI Image, and Advanced Driver Assistance System (ADAS). The QCI&AI Learning Tools showcased their ability to collect and interact with data by displaying information, verbalizing it, and initiating hardware actions. These tools manage data flow effectively, receiving and sending data to the QCI&AI-FML Learning Platform, either manually or automatically, and responding based on the inferred results to facilitate a dynamic two-way interaction. The platform also supports cross-location connectivity, enabling students in Malaysia to interact with tools in Taiwan on 25 March 2024, thereby broadening the educational experience and demonstrating the platform's utility in facilitating international educational collaborations. Additionally, the QCI Agent & GAI Image Platform enhances the learning experience by generating images from inputs in English or Taiwanese, whether in text or speech form. This feature provides visual aids that make learning more accessible and engaging.

The feedback from the QCI sandbox event in Malaysia in March reveals a strong appreciation for the educational and practical aspects of the program, particularly in AI and quantum computing. Participants valued the hands-on learning experience, which not only deepened their understanding of complex topics like data generation but also sparked their interest in further exploring these technologies. Attendees praised the program for the mentorship and support from teachers and mentors, especially in guiding them through challenging projects like creating a tourist spot recommendation system. They expressed hope that the program would continue to inspire and equip future generations with necessary STEM skills, contributing positively to society.



Organizers and Trainers - March 30, 2024.

#### Contd from Page 21.

The reflections from participants of the event in Hong Kong underscored the impact of hands-on experience with emerging technologies. They valued the opportunity to explore advanced topics not typically covered in classrooms, such as fuzzy logic, soft optimization, and Quantum AI, emphasizing the unique experience of directly engaging with these technologies. Participants remarked on the significant advancements in computational intelligence

and artificial intelligence, noting how these developments have transformed previously theoretical concepts into tools that enhance everyday convenience. A Generative AI demonstration showed AI's ability to bridge the gap between Taiwanese auditory inputs and visual outputs by converting audio descriptions into AI-generated images.

The organizers sincerely appreciate the IEEE R10 SPNIC, Chun Che Lance Fung, Takako Hashimoto, Marek Reformat, and Markus Wagner for their support of the events. We also thank the members of the NUTN team for their invaluable

contributions in teaching, editing educational and activity videos, and system development. Additionally, we acknowledge the significant teaching efforts and assistance of the UniMAP MySTEM Ambassador Club, the IEEE UniMAP Student Branch, and T Plus Global Company Limited, Hong Kong, during the event. Finally, we express our gratitude to William Khoo Boo Wooi, CEO of Tech Dome Penang, and his team for their assistance with venue arrangements in Malaysia, and we are grateful for the financial support provided by the IEEE R10 SPNIC project.



Participants at Tech Dome Penang, Malaysia - March 30, 2024.

### SOUTH KOREA'S FIRST MILESTONE DEDICATION CEREMONY AND 2024 HMPC MEETING

Dae-Gwon Jeong, History Committee Chair, IEEE Seoul Section

#### Milestone Dedication Ceremony

On June 10 at 2:00 PM, 2024, the dedication ceremony for Korea's first IEEE Milestone for CDMA commercialization was held at SKT Tower in Seoul. The IEEE President-elect Kathleen Kramer unveiled the plaque with the Deputy Minister of MSIT, four representatives of SKT, ETRI, Samsung Electronics, LG Electronics, and Gilsoo Jang and Kukjin Chun from Seoul Section in front of about 80 media reporters. More than 200 people gathered to watch the historical event meaningful to the ordinary people in the region. After the unveiling, the ceremony went on in the Supex Hall on the 4th floor of the building. About 150 people including the OB researchers and developers who had participated in the CDMA project in the 1990s gathered in the hall to celebrate the result of their sacrifice, Korea's first milestone. A TV channel uploaded the ceremony and the interview with President-elect Kramer on YouTube.



Photo of President-elect Kathleen Kramer and related representatives celebrating the dedication of the milestone plaque.

#### 2024 HMPC Meeting

On the same day at 6:00 PM, the 2024 HMPC (Higher Membership Promotion Committee) Annual Meeting was held in the Press Center Building, near the SK Tower with quests IEEE President-elect Professor Kathleen Kramer and the former R10 Director and 2020-2021 IEEE History Committee Chair Professor Janina Mazierska. The main purpose of the HMPC is to celebrate the newly elevated IEEE Fellows in 2024. Seoul Section had 4 new IEEE Fellows out of 7 in Korea Council. The meeting proceeded with dinner and special talks by Kathleen Kramer, Janina Mazierska, Jong Hoon Lee, Vice President of SKT, and Young Jo Ko, a team leader in ETRI. Four members were given Plaques of Recognition and Appreciation. The final touch of the meeting was beautiful Tango dances by a professional dance couple. About 60 IEEE members participated in the meeting.



Photo of 2024 HMPC Annual Meeting

# IEEE LIFE MEMBERS INDUSTRIAL VISIT TO NATIONAL THERMAL POWER STATION DADRI

#### H L Bajaj. Chair And S S Jamuar, Secretary, Delhi Section Life Members Affinity Group

On 15 May 2024, members of the IEEE Delhi Section Life Members Affinity Group (LMAG) visited the NTPC Dadri power plant. Welcomed by Shri Gampa Brahmaji Rao, Executive Director, and Sri U V M Rao, General Manager (O&M), the group was briefed on the NTPC Dadri complex's operations and facilities.

Following a warm reception and a short introductory film, the LMAG team toured the clean and efficiently maintained NTPC complex. They explored various facilities, including coal and gas-fired units, a unique ash dyke, and the HVDC/AC converter station. The visit provided an opportunity to witness the Real Simulation Model and Real-Time Monitoring and Control room, showcasing the plant's live operations and data monitoring capabilities.

The team also visited a man-made mount with a golf course, planting two trees to mark their visit. The day concluded with a lunch hosted by Shri Gampa Brahmaji Rao, facilitated by Mr. Sumit and Mr. Manish from NTPC Dadri. The IEEE Delhi Section LMAG extends heartfelt thanks to NTPC Dadri for the insightful and well-organized visit, which enhanced their understanding of NTPC's innovative operations and commitment to sustainability.



Observing Real-Time Control Room Monitors



At the Tree Plantation by Delhi LMAG Members in NTPC Complex

## IEEE R10 LIFE MEMBERS COMMITTEE ACTIVITIES

#### Toshitaka Tsuda, Chair, IEEE R10 Life Members Committee

The MGA Life Members Committee (LMC) awards selection process was carried out by the R10 LMC committee for selecting the LM Individual Service Award and the LMAG Achievement Award. All nominees demonstrated outstanding contributions and the winners, approved by MGA LMC, are as follows:

- R10 LM Individual Service Award: Dr. Damodaran
- R10 LMAG Achievement Award: Kerala LMAG

Notably, Kerala LMAG also won the Global Award and R10 LMC congratulates the awardees for their remarkable LM outreach activities.

One exemplary outreach activity from Kerala, led by Dr. Damodaran, focuses on energizing and empowering local communities. Technical workers and women have limited opportunities to update their skills in many regions. To address this, IEEE Kerala Section developed training programs ranging from half-day to multi-day sessions. These programs enable participants to acquire practical skills, boosting their confidence and economic opportunities.

A notable initiative, "Women Empowerment through Green Energy Promotion," trains groups of women in assembling, testing, and packaging LED lamps. These women then promote green energy and efficient energy use within their communities. As of May 2024, 25 such groups have been trained, with over half already operational.

R10 LMC has set six projects for this year, including expanding outreach activities. In our second LMAG meet, Professor Onoye, R10 History Committee Chair, was invited to present on History Committee activities, showcasing potential areas for LM contributions. The LMC is committed to continuing these impactful activities throughout the year.



LED Training at Newman Thodupuzha

# **VOLUME 25 | ISSUE 3**

#### **IEEE R10 YOUNG** PROFESSIONALS WEBINAR TRAINING PROGRAM **SERIES**

#### Muhammad Hamza Ihtisham, Committee Member, IEEE R10 Young Professionals Committee

We are delighted to announce the successful completion of the IEEE R10 Young Professionals (YP) Webinar Series. This initiative was crafted to provide our members with essential insights and opportunities for professional development and community engagement.

#### **IEEE R10 YP Awards**

The session provided comprehensive insights into the eligibility criteria and application process for various IEEE R10 Young Professionals awards. Attendees were inspired by testimonials from past recipients, showcasing the profound impact these recognitions can have on their professional careers.

#### **IEEE R10 Event Funding**

The session provided an in-depth overview of funding opportunities for IEEE R10 events. It covered identifying funding sources, crafting successful funding proposals, and managing event budgets effectively. Attendees gained practical tips and strategies, making it an invaluable resource for planning future IEEE events.

#### **IEEE R10 YP Volunteering Opportunities**

The webinar showcased the diverse volunteering roles and projects within IEEE R10 Young Professionals. It emphasized the personal and professional benefits of volunteering, such as skill development, networking, and career advancement motivating them to actively engage in IEEE volunteering.

#### **IEEE R10 YP Town Hall**

The series concluded with an engaging Town Hall featuring the IEEE R10 Director and Director-Elect. The session focused on volunteer engagement and opportunities and included a lively Q&A segment. Participants valued the chance to interact directly with the leaders, share experiences, and seek pieces of advice.



Participants of the IEEE R10 YP Webinar Series

### **IEEE R10 SAC VOLUNTEER**

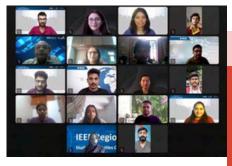
#### Warunika Hippola, Regional Student Representative, IEEE R10

The IEEE R10 Volunteer Training Program was successfully held virtually on 7-8 June 2024 by the IEEE R10 Student Activities Committee aiming to equip IEEE Region volunteers from Student Branches, Student Branch Affinity Groups, and Student Branch Chapters, with advanced skills and knowledge for effective contributions to the IEEE community. The major objectives of the training were to Enhance the capabilities of volunteers, Foster a skilled volunteer community that is equipped with knowledge of IEEE tools and technologies, and encourage individual volunteers to contribute to the community effectively.

The event started with an informative session by Dr. Anjali Diwan, followed by a series of engaging talks. Topics included "Introduction to IEEE and Available IEEE Resources" by Prof. Jennifer Dela Cruz, "IEEE Member and Geographic Activities" by Aniketh Shenoy, "Opportunities for Funding within IEEE" by Dr. Sameer S.M, "Utilizing VTools for Maximum Impact" by Dr. Abhishek Appaji, "Know Your Affinity Groups" by Dr. Aishwarya Bandla. Further sessions namely "Strategies for Membership Growth and Retention" by Dr. Mamiko Inamori, "IEEE: Enhancing Leadership and Networking Skills" by Cybele Ghanem and "Navigating the IEEE Student Awards Process" by Prof. Ray Cheung, Dr. Nicholas Wong conducted an informative session on "Scholarships for Students and Travel Grants" followed by "Events and Financial Reporting of IEEE Sections" by Warunika Hippola and "IEEE Code of Ethics" by Dr. Sudeendhra Kaushik. These sessions provided valuable insights into various aspects of IEEE, from utilizing VTools to understanding the IEEE Code of Ethics, enhancing leadership and networking skills, and strategies for membership growth and retention.

This training program was planned to be an effective initiative, significantly enhancing the skills, knowledge, and networks of IEEE volunteers proving importance through the excellent participation of over 150 volunteers each day.

This training not only empowered individual volunteers but also strengthened the IEEE overall community, fostering a more connected, knowledgeable, and volunteer capable base.



Participants of the R10 SAC Training Program

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#### **IEEE R10 Humanitarian Technology Conference 2024**

Sustainable Technologies Supporting Environment, Social, and Governance (ESG)

1 - 3 October 2024 | Royal Chulan, Kuala Lumpur, Malaysia

The 2024 IEEE Region 10 Humanitarian Technology Conference (IEEE R10-HTC 2024) is an exceptional conference dedicated to exploring and advancing sustainable humanitarian technologies that support ESG principles.

Sponsored by the IEEE Humanitarian Technologies Board, this conference will bring together a diverse community of professionals, researchers, and innovators from the IEEE Region 10 to collaborate and share their perceptiveness on humanitarian technology.

#### **Paper Tracks**

- Industry 4.0
- Agriculture
- Technologies in Education
- Technologies, Innovations, and Entrepreneurship
- Security and Surveillance
- Machine Learning
- Privacy, Security, and Human Rights
- Data Science and Engineering
- Genomics and Bioinformatics
- Green and Smart Materials and Composites for Sustainable Habitat
- **Environment and Sustainability**
- Smart Technologies and IoT
- Smart City and Smart Village
- **Energy and Renewable Energy**
- Green Technology

#### **HTA Forum**

Discussion on the latest developments, challenges, and opportunities in humanitarian technology, fostering collaboration and knowledge sharing among participants.

#### Speakers:

Lance Fung, R10 Director Lwanga Herbert, HTB Chair Emi Yano, R10 HTA Chair

Dr. Nordin Ramli, Malaysia Section Chair



### **KEYNOTE SPEAKER**

#### LWANGA HERBERT

Global Chair

IEEE Humanitarian Technologies Board

His insights and leadership in humanitarian technology will set the stage for an inspiring and impactful conference.



Workshop 1: Reverse Vaccinology: Using Insilico Methods to **Develop Vaccines** 

Workshop 2: Knowledge to Action Workshop for Climate Literacy and Technology for Humanitarian Aid

Tutorial 1: Transforming Healthcare using AI and XAI: New Frontiers and Research Directions

Tutorial 2: Future 6G Wireless Network Technologies with Artificial Intelligence and IoT for Sustainable Earth and Healthcare

Tutorial 3: Self-Supervised Learning: An Efficient Emerging Learning Technique to Learn Representations from Unlabeled Image Data

Tutorial 4: Introduction to Person Tracking for Autonomous Robotics Using Python

#### In conjunction with IEEE R10-HTC 2024, another two important events will be held:

- R10 HTA Impact Congress will be held on 30th September 2024 at the Universiti Teknologi Malaysia Kuala Lumpur Campus.
- R10 Industry Conclave will held on 30th Sept to 1st Oct 2024 at Royale Chulan Hotel (same venue as IEEE R10-HTC 2024).

#### **Innovation Challenge**

#### Fostering the Future: Advancing Humanity Through Technological Ingenuity

The Innovation Challenge encourages participants to propose creative solutions for social and humanitarian issues.

#### Key topics:

- Community Empowerment and Development
- Climate Resilience and Adaptation Inclusive Technology for Accessibility
- **Empowering Vulnerable Communities**
- Sustainable Resource Innovation and Conservation
- **Exploration of Emerging Technologies**
- Humanitarian Tech Beyond Borders

#### 1st Place: **USD 500**

#### Top 3 Finalists:

Opportunity to present their projects at IEEE R10 HTC 2024 Complimentary registration (up to 4 members per group) Certificate of participation USD 400 travel expenses per team.

For more information, visit the website.

#### **SEDA Innovation Challenge**

Promotes technological solutions for sustainable energy management, driving sector innovation with the support of strategic partners UTM, UCSI, and Leave a Nest.

#### Eligibility:

- Malaysian or foreign national residing in Malaysia
- 18 years old and above
- Possess engineering, technology, or related fields background

#### Participation Steps:

- Register for the challenge.
- Submit a 3-minute pitch video by 8th August 2024.
- Submit full project documentation by 19th September 2024
- Showcase your innovation.

#### Focus Areas:

- Artificial Intelligence (AI) Analytics
- Internet of Things (IoT) & Blockchain
- Smart Geographical Information System (GIS) & Digital Twin

- · Innovation Award
- · Impact Award
- · People's Choice Award

For more information, visit the website.

**IEEE Intelligent Transportation** 



**Technological Advancements to Help Society Overcome Various Socio Economic and Health Challenges** 

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### **CALL FOR PAPERS**

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#### IMPORTANT DATE

Last Date of Submission of Full-papers	15 May 2024
Paper Acceptance Notification	15 July 2024
Early Bird Registration Deadline	30 July 2024
Submission of Camera-ready Papers	15 August 2024
Last Date of Registration	15 August 2024(for authors)
	15 September 2024(for genral delegates

Organizing Chair Prof. Rajnish Sharma | Vice Chancellor, Chitkara University, HP

#### REGISTRATION FEES

Visit Our Website for More information.

All accepted papers upon presentation will be sent for consideration of IEEE for publication on IEEE Xplore.



Weblink for Paper Submissions

https://ieeedelhi-tensymp2024.org/call-papers.php

For Paper Submission



Prospective authors are invited to submit original research papers (not being considered for publication elsewhere) in standard IEEE conference template describing new theoretical and/or experimental research results in the following tracks (but are not limited to):

#### Track-1 Computer and Information Technology

Prof. M N Hoda, Prof Manju Khari, JNU, Prof Manpreet Kathuria, Dr Shashank Awasthi, G L Bajaj

Artificial & Augmented intelligence and their applications, Biometrics & RFID, Computational Intelligence, Deep Learning, Big Data Analytics, IOT, 5G Networks and Cloud Computing, Data and Business Analytics, Computational Social Science & Social Networks.

#### Track-2 Data Science, Cloud and Big Data Analytics

Prof. Bijender Kumar - NSUT, New Delhi, Dr Sugandha Singh, SGT Univ, Dr Poonam Rani, NSUT, Dr Gaurav Singhal, NSUT

Computing Technologies Algorithms Programming Languages Computing Architectures and Systems Computer Graphics, Vision and Animation Software and Database System, Multimedia Engineering Networks

Track-3 Electronics, VLSI Technology & Embedded System Prof. Manoj Saxena - Delhi University, New Delhi, Dr Shruti Jain, JUIT, Dr Arti Jain, NSUT, Dr Patteti Krishna, NSUT, Prof Arun Singh, PEC, Dr Sneha Kabra

Electron Devices & Solid-State Circuits, Circuits and Systems, Consumer Electronics, Micro and Nanoelectronics, Photonics, RF Circuits.

Track-4 Power, Energy and Power Electronics
Prof. Bhim Singh, Indian Institute of Technology, Prof. B. K. Panigrahi, Indian Institute of Technology, Dr Arun Verma, IIT Jammu, Dr Ujjwal Kalla, NIT Delhi, Dr Diwakar Pathak Conventional, Renewable and Green Energy, Energy Storage Devices, Electric Vehicles and their Charging infrastructure, Onboard, System planning & economics, operation & control.

#### Track-5 Communications and Signal Processing

Prof. Ranjan K. Mallik, Indian Institute of Technology, Dr Urvashi Bansal, NSUT, Prof Richa Bhatia, NSUT

Communication, Signal, Image and Video Processing, RF, Microwave, Millimetre wave: Theory and Techniques, Electromagnetics, Intelligent Transportation Systems.

Track-6 Intelligent Control and Instrumentation Prof Lilie Devan, NIT Kurukshetra, Dr Deepti Saxena, MNIT Jaipur, Dr Anil Kumar Yadav, NIT jalandhar

Intelligent Control Systems Robust, Fuzzy, Neural Network-based, Applications in inter-

disciplinary areas.

Track-7 Biomedical Engineering and Healthcare Technologies

Prof V R Singh, NSUT, Dr Jyoti Yadav, NSUT, Dr Richa Sharma, NIT Jalandhar Biomedical Engineering and Healthcare Technologies Biomedical Signal Processing and Instrumentation, Wearable Sensors for Health care monitoring.

#### Track-8 Special Tracks: WIE, Industry, HTC, Education

WIE: Prof Preeti Bajaj, Pune, Dr Mini Ulanat, Kerala, Dr M Padma Sai, Hyderabad, Dr Foram Rajdev, Gujarat, Dr Rashmi Agrawal, JC Bose University

Industry: Mr Sanjay Kar Choudhary, Mr Ajai Goel, Mr K V N Pawan Kumar, Mr Sanjay Wadhwa

HTC: Prof Rajender Sinh Jadeja, Marwadi University, Prof A Q Ansari, JMI, Abhishek Appaji, , Dr Naresh Kumar, G L Bajaj

Education: Prof Rajashree Jain, Pune, Dr Vijayalata Reddy, Hyderabad , Dr Gunjan Varshney, JSS, Dr Ritambra Parashar, JCERC, Dr Anuradha Tomar, NSUT, Dr Pankaj Sharma, R D College

Product Safety & Reliability Engineering, Social and Humanitarian Implications of Technology, Theoretical Computer Science, Emerging technologies and their applications in education, publications, tourism, healthcare, agriculture etc

### IEEE R10 CONFERENCE QUALITY AND MANAGEMENT WORKSHOP

S M Sameer, Chair, IEEE R10 Conference Quality and Management Committee

Contd from Page 1.

The event was attended by 100 conference organizers from 65+ different colleges/institutions and organizations across the Bangalore Section (State of Karnataka, India). The topics include Conference Quality assurance, Statistics of conferences, Prerequisites of the conference, Conference application process, Conference committee, and their roles, Conference Execution and TPC, Proceedings Preparation, Financial Planning and Execution, Best practices, and Case studies on good and bad conferences. The speakers for the conference were Dr. Abhishek Appaji, Dr. Chengappa M R, Dr. Navin Kumar, Dr. Chandrakanta Kumar, Dr. Prasant Mishra, Dr. Vasudeva Acharya, and Dr. Deepa Shenoy, as ExCom Members of IEEE Bangalore Section with more experience in organizing quality conferences. The participants provided positive feedback and wanted to be

epeated in different regions of the IEEE Bangalore Section covering more colleges locally.

The following is the summary of feedback on various aspects of the workshop

- 100% of the attendees mentioned it helped them attend the workshop.
- 75% of the attendees felt they had learned something new.
- 65% of attendees indicate more confident in organizing the conference.
- 75% of the attendees agreed to attend such programs in the future and recommend them to others.
- 80% of the attendees liked the food provided during the event
- 66% of the attendees felt the venue was good.
- 65% of the attendees felt the registration kit was good.

#### **INDUSTRY DAY 2024 - SERIES 2**

Bernard Lim, Chair, IEEE R10 Ad Hoc Committee on Industry Engagement and Round Table (ACIERT)

Contd from Page 1.

This program was conducted coinciding with 2024-International Conference on Communication, computing, and Internet of Things (IC3IoT-2024),

The Industry Day was held at the Society for Electronic Transactions, Ministry of Electronics and IT, Government of India. The event included an Industry Round Table Discussion featuring esteemed speakers who have made outstanding contributions in their respective fields. Their dedication and passion for the topic have significantly impacted and inspired many within the community.

Industry Day was commenced with welcoming remarks from Bernard Lim, Chair of the IEEE R10 Ad Hoc Committee on Industry Engagement and Round Table (ACIERT), and Porkumaran Karantharaj, Chair of the IEEE Madras Section. The session was honored to receive opening remarks from IEEE R10 Director, Prof. Lance Fung. The keynote address was delivered by Bala Prasanna.



Participants to the Industry Day 2024 Series 2

Over 50 people attended Industry Day. The event concluded with numerous questions directed at the panelists.

The primary purpose of this session was to share knowledge, foster learning, and inspire one another as we work towards a future where technology serves as a force for good in the world. The event attracted a strong turnout from academia, government institutions, and industry, highlighting the important bonds formed among these sectors.



**IEEE Blended Learning Program** 

### AIOT FOR CLIMATE CHANGE A HANDS-ON COURSE

Srikanth Chandrasekaran, IEEE, Rajesh Kunnath, Radiostudio and Pramod Kumar, IEEE

"IEEE promotes clean-tech solutions for climate sustainability" - Prof. Saifur Rahman, 2023 IEEE President

According to the latest <u>IPCC report</u>, human-induced climate change already impacts many global weather and climate extremes. IEEE India office, in association with RadioStudio, is planning to offer a course on applying AIoT (Artificial Intelligence (AI) combined with the Internet of Things (IoT)) technologies to address climate change problems through its Blended Learning Program (BLP). IEEE BLP combines the latest eLearning techniques with extensive hands-on practice. It takes the best of virtual learning and face-to-face training to provide a flexible yet comprehensive learning experience.

The target audience for this AIoT course is college students (sophomores and above) and professionals with a background in STEM (Science, Technology, Engineering, and Mathematics). The course will consist of the following modules:

- The first module will present an overview of climate change and the five main causes of greenhouse gas emissions;
  - i. Making things (cement, steel, plastic)
  - ii. Generating and consuming
  - iii. Growing things (plants and animals)
  - iv. Getting around (planes, trucks, cargo ships)
  - v. Heating, cooling, and refrigeration.
- The second module will discuss the problem areas that can be addressed through AloT technologies without a laboratory or expensive infrastructure. For instance, distributed energy resources and hydroponics would be addressed, but not the greening of cement and steel production.
- The third module will discuss a hardware module we built to interface with sensors. The hardware module will enable access to the data from different kinds of sensors with relative ease. The hardware and the data transport architecture is designed in such a way that a non-technical student should be able to get a feel for the data with very little effort while the more technically inclined may use it for exploring and deploying other sensors based upon particular needs, not necessarily provided as part of the course.
- The fourth module will present the software modules required to interface with the sensors and actuators and analyze the collected time series data. For this purpose, the Python programming language and Jupyter notebooks will be used.
- The fifth and final module will be a capstone project the students must build to complete the course.

This course is inspired by <u>Open-Source software</u> and <u>Amateur Radio movements</u>, where grassroots efforts of a large number of volunteers resulted in large-scale benefits for humanity. We are confident that this course will increase students' awareness of climate change and, more importantly, inspire and equip them to build effective solutions for mitigating it. Visit blp.ieee.org for more information.

#### IEEE QLD SECTION TOUR TO NOJA POWER SWITCHGEAR MANUFACTURING CAMPUS

Rajesh Nighot, Educational Activities Chair, IEEE QUEENSLAND (QLD) Section

On 1st May 2024, the IEEE Queensland Section members visited the NOJA Power Headquarters and Manufacturing Campus in Brisbane, Australia.NOJA Power is a world-leading manufacturer of medium-voltage electrical equipment. The company has manufactured more than 100,000 NOJA Power OSM series automatic circuit reclosers installed in 106 countries worldwide.



Participants at the NOJA Power Factory in Brisbane

The IEEE QLD YP Chair, Dr. Sameera Samarasinghe, and IEEE PES Chair, Dr. Feifei Bai, were actively involved in promoting the event. The tour was a great opportunity for university students and young engineers to learn and see how NOJA Power researches, develops, manufactures and supplies medium-voltage switchgear.Dr. Chandima Ekanayake, Chair of the IEEE Queensland Section, believes that site visits are beneficial to develop an understanding of power systems and foster connections with the local industry. The factory visit was successful due to the collaborative efforts of Martin van der Linde, GM Marketing NOJA Power and his team. At the end of the tour, NOJA Power's team was presented a souvenir by the IEEE QLD Section to acknowledge the support.



IEEE
Souvenier
Presented to
Martin van
der Linde General
Manager
Marketing

#### IEEE R10 ROBOTICS COMPETITION STAGE 1 ORGANIZED BY IEEE INDONESIA SECTION

Aryo De Wibowo Muhammad Sidik, Member, Student Activities Committee (SAC), IEEE Indonesia Section

The IEEE Indonesia Section successfully organized the IEEE R10 Robotics Competition 2024 Stage 1 This significant event, organized along with IEEE Student Branch of Universitas Dian Nuswantoro (UDINUS), highlighted the innovative spirit and technical skills of participants. Stage 1 consisted of two phases. The competition began on Phase 1 on January 2024, with an orientation and registration session that provided comprehensive information through posters and an online Zoom meeting. From 27 January to 29 February 2024,, participants submitted detailed robotics project proposals, which included project descriptions, designs, methodologies, and implementation plans. On 3 March 2024, top 10 proposals were announced and they advanced to the next phase.

Phase 2 of the competition required the top 10 teams to submit video presentations, posters, and technical reports by 20 April 2024. The offline competition took place on 27 April 2024at UDINUSSemarang City, Central Java, Indonesia. During this event, the teams showcased their robots. The day also featured a Pre-University STEM Workshop presented by Mr. Auzi Asfarian, S.Kom., M.Kom., for senior high school student and concluded with the announcement of the two winning teams, based on evaluations of their robots, videos, posters, and technical reports.

On 28 April 2024, the top two teams were nominated to represent the IEEE Indonesia Section in Stage 2 of the R10 Robotics Competition. The Section extends its heartfelt thanks to the organizers, IEEE Indonesia Section and IEEE Student Branch of UDINUS, for their collaboration and support. The active participation of all participants was truly inspiring, and the organizing team looks forward to future collaborations in upcoming events.



Spotlight moment at the IEEE R10 Robotics Competition Stage 1, organized by the IEEE Indonesia Section

# INNOVATEX '24: INSPIRING GIRLS TO INNOVATE, CREATE, AND LEAD THE WAY!

Duleesha Samarakoon, Chair, IEEE WIE Student Branch Affinity Group, University of Peradeniya

InnovateX '24, held on April 26, 2024, by the IEEE Women in Engineering (WIE) Student Branch Affinity Group of the University of Peradeniya, in collaboration with the IEEE Student Branch, successfully empowered over 80 Advanced Level female students from Kandy district, Sri Lanka. The event aimed to cultivate leadership skills and enrich STEM knowledge among these young women. It featured significant lectures from four speakers and some other notable guests.





Highlights from InnovateX '24

A presentation by engineering undergraduates introduced electronic components and circuits, providing the students with practical knowledge. The students were given a guided tour of the Faculty of Engineering, witnessing labs and projects, which inspired them to pursue their own projects. An interactive practical session was conducted by the undergraduate volunteer team, guiding them to build their own electronic circuits, and empowering them with handson skills. The top three designs received prizes, while all participants received gifts and tokens, acknowledging their efforts. Refreshments were provided, ensuring a comfortable experience. InnovateX '24 provided valuable insights, practical skills, and inspiration for these young women to pursue the STEM field.

Several significant lectures were conducted by distinguished guests, each a leader in their respective fields. Eng. (Mrs.) M. M. N. Munawwara, Former AGM (CS) at Ceylon Electricity Board, shared her insights, followed by Senior Lecturer Dr. Waranatha Abeygunasekara, and the Advisor of IEEE WIE Student Branch Affinity Group of University of Peradeniya, Prof. Maheshi Dissanayake. This was followed by an inspiring recorded talk by Dr. Anuththara Rupasinghe, a postdoctoral research associate from Princeton University. Other notable guests included Prof. Lilantha Samaranayake, Head of the Department of Electrical and Electronic Engineering, and Dr. Ruwan Ranaweera, Advisor of the IEEE Student Branch at the University of Peradeniya.

#### HANDS-ON WORKSHOP AT HAMDARD UNIVERSITY

#### Muhammad Faisal Khan, Secretary, IEEE PES Karachi Chapter

IEEE Young Professionals (YP) Affinity Group of Karachi Section, in collaboration with IEEE Hamdard Institute of Engineering & Technology (HIET) WIE AG, IEEE HIET Student Branch, IEEE Power and Energy Society Karachi Chapter, organized an exciting event (comprised of hands-on workshops) titled "Grooming Young Professionals for Industry 4.0", at Hamdard University Karachi on 24-25 April 2024. The event was funded by IEEE Young Professionals under the IEEE Young Professionals Local Activity Fund. The activity provided practical training on IoT, Microcontrollers, PLCs, and Microsoft Power BI.

Mr. Abdullah Tariq, and Mr. Jahangir Khan from HIET delivered sessions on IoT and industrial automation, while Prof. Rashid Hussain, HIET highlighted the significance of Power BI in big data. The event concluded with the distribution of souvenirs and shields, inspiring participants to leverage data-driven insights for innovation.



Participants to the "Grooming Young Professionals for the Industry 4.0".

#### LIBRARY ADVANCEMENT AND REVITALIZATION FOR COLLABORATIVE LEARNING

Nandana Suresh, Committee Member, IEEE Student Branch Adi Shankara Institute of Engineering and Technology

The "Library Advancement and Revitalization for Collaborative Learning" (LAARC) project, carried out by IEEE Student Branch of Adi Shankara Institute of Engineering and Technology (ASIET), is a humanitarian project aimed at renovating and digitalizing the Kanaka Public Library in Paniyeli Poru, Perumbavoor. The project completion ceremony was held on 21 April 2024 at the Kanaka Public Library itself.

Prominent people graced the occasion, including Mr. Bazil Panchayat member Mr. Vijayan, the library president, Mr. Bipin, the library secretary, Mr. Satheesh, the beat forest officer, Ms. Remya K P, Branch Counselor, and other supporters.



Sessions at LAARC Project



Participants to LAARC Project at Perumbavoor

## CIRCUITS BASED STEM WORKSHOP FOR SCHOOL CHILDREN

Nosherwan Shoaib, Branch Counselor, IEEE SB of NUST School of Electrical Engineering and Computer Science

A 1-day STEM workshop for Student Welfare School System was held on 5 April 2024. More than 50 students from 5th to 10th grade participated in the workshop. The students were trained on various STEM activities including wireless communication, home automation. Flectric circuits and Robotics. Four STEM trainers from National University of Science and



Technology (NUST), Islamabad, Pakistan conducted the activities. The workshop was aligned with UN sustainable development goals (SDGs) including no poverty, quality education and reduced inequalities.

Following objectives were achieved from this workshop:

- 1.To engage students and teachers in inquiry-based activities based on Wireless communication, Radar, Electronics, Robotics, and Internet of Things (IoT).
- 2. To encourage student interaction with trainers.
- 3. To outreach IEEE (in general) and IEEE STEM initiatives (in particular) among middle and high school students and teachers.

## IEEE EPS: CAREER ASPIRATION TALK AT THE UNIVERSITY OF MALAYA

Vanessa Tan, Committee Member, IEEE EPS Malaysia Chapter

The Faculty of Engineering, University Malaya has invited Dr Eu Poh Leng, the Chairlady of IEEE EPS Malaysia and Senior Director of External Package Innovation, NXP Semiconductors Malaysia, to share her career aspiration in Semiconductor Packaging in conjunction with the celebration of International Women's Day on 8th March 2024.

Dr Eu shared her secret of success throughout her 27 years of working in the Semiconductors Packaging Industry, including having a positive mindset, doing everything wholeheartedly, having integrity and not making enemies. Students were interactively engaged in the sharing. Further, they asked many questions, including how to be prepared for the working world and have a positive mindset. Dr Eu has provided many examples of life experiences to encourage and inspire the students to be sound engineers and be a blessing to others.



Participants in High Spirits at the Event

## 2 DAYS WORKSHOP ON ADVANCEMENTS IN DEFENCE TECHNOLOGY

Shubhranshu Panda, Member, IEEE VSSUT Student Branch

On 10- 11 April 2024, the IEEE Veer Surendra Sai University of Technology (VSSUT) Student Branch in collaboration with IEEE COMSOC Student Chapter, VSSUT, Burla, and IEEE COMSOC Chapter, Integrated Test Range, Defense Research and Development Organization, Chandipur, organized the RGADT-2024 (Recent Growth and Advancement in Defence Technology- 2024) workshop, in the E-Learning Centre, VSSUT, Burla, attracting over 200 participants. Leading scientists Dr. Pradipta Roy, Mr. Amiya Kumar Das, and Dr. Arun Kumar Ray illuminated the stage with groundbreaking revelations on advancements in defence technology.



Participants to the 2 Days Workshop on Defence Technology

Concluding the event, Prof. Harish Kumar Sahoo extended heartfelt gratitude, bringing to a close two days filled with enriching learning experiences and valuable networking opportunities.



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Registration is currently open for 2024 sessions - including our virtual session Monday-Tuesday, 4-5 November 2024, in a convenient time zone for members in Region 10.

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## IEEE COMPUTER SOCIETY EVENTS FROM VEL TECH UNIVERSITY

Vishal G P, Chair, IEEE Computer Society, Vel Tech Rangarajan Dr.Sagunthala R and D Institute of Science and Technology

#### **Tech Trivian Quiz Competition**

The IEEE Computer Society Student Chapter of Vel Tech Rangarajan Dr.Sagunthala R and D Institute of Science and Technology hosted the "Tech Trivian Quiz Competition" on 28 February 2024, at the Engineering Hive, Vel Tech Rangarajan Dr. Sagunthala R and D Institute of Science and Technology, with around 110 participants in 50 teams, that brought together tech enthusiastic students from various departments and years. Participants attempted and handled an array of challenging questions with topics ranging from computer science fundamentals to cutting-edge technologies.



Participants at Tech Trivian Quiz Competition

#### Design Dazzle Webathon - 24

On 5 March 2024, challenging "Design Dazzle Webathon-24" was held under the expert guidance of Dr. S. Saran Raj, the event attracted a great number of participants from student web designers across the university's campus. Contestants showcased their creativity and technical talents through visually stunning website designs.



Webathon Participants at Sessions on Web Development

The event provided a platform for aspiring designers to exhibit their skills and push the boundaries of digital creativity. Judges were impressed by the participants' creativity, originality, and attention to detail displayed in the submissions.

#### Interview Lab: Mock Interview Edition

On 7 March 2024, the Vel Tech Rangarajan Dr. Sagunthala R and D Institute of Science and buzzed with Technology excitement as the IEEE Computer Society Student Chapter hosted its highly anticipated event, the "Interview Lab: Mock Interview Edition." This initiative aimed to provide invaluable experience budding engineers by simulating real-world interview scenarios. With 30 eager participants, the event promised to be enriching opportunity students to hone their interview skills and gain practical insights into the recruitment process.



Mock Interviews

The Mock Interview Edition of the Interview Lab not only provided students with a platform to refine their interview skills but also instilled confidence in them as they navigate the competitive landscape of the job market.



Idea Contest: SUSTAIN-ATHON'24

#### "CAN YOU MEME?"

"Can You Meme" was an engaging and enlightening event tailored for tech enthusiasts eager to showcase their creativity while delving into the realm of emerging technologies. Held at Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology on the 5 March, 2024, this unique competition brought together participants with a passion for both humor and innovation.



Participants were encouraged to blend their with technological themes, resulting in a diverse array of humorous and thought-provoking memes.

The heart of the event revolved around the creation of memes intricately linked to various facets of technology.

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#### IEEE HYDERABAD SECTION- PROMINENT EVENTS

Gobinda Prasad Acharya, Chief Editor, IEEE Hyderabad Section Newsletter

DML on "Millimeter-wave Transceiver Chips with Antenna in Package"

The IEEE MTT-S/AP-S/EMC-S Joint Chapter of the Hyderabad Section organized a Distinguished Microwave Lecture on "Millimeter-wave Transceiver Chips with Antenna in Package." on 12 April 2024. The speaker was Prof. Quan Xue from the South China University of Technology, Guangzhou, Guangdong, China who talked about mixed design methodology, using both lumped and distributed elements in millimeter-wave integrated circuit design, which was of great interest not only for compound semiconductors but also for CMOS integrated circuits. In the talk, innovative design approaches and methodologies for millimeter-wave integrated circuits, subsystems, and corresponding antenna-in-package were discussed.

PELS Regional DLP Webinar on "Micro-grid Control and Active Distribution Systems"

The PES/PELS/IAS Joint Chapter of the Hyderabad Section successfully conducted a PELS Regional Distinguished Lecture Program (DLP) webinar on 7 June 2024. The webinar focused on the topic of "Microgrid Control and Active Distribution Systems," presented by the esteemed Prof. Mahesh Kumar Mishra from IIT Madras. The event aimed to provide insights into the latest advancements and challenges in microgrid control and the active distribution of electrical systems.

13th National Level Student Technical Symposium ABINAVA-SIGMA 2k24

A Paper Presentation contest was organized at the Sri Ramakrishna Engineering College (SREC) campus by the Department of Computer Science and Engineering, CSE Data Science, and Computer Science and Design in association with the IEEE Student Branch and IEEE Robotics and Automation Society on the occasion of the 13th National Level Student Technical Symposium ABHINAVA-SIGMA 2K24 on 15 April 2024. Students from SREC and other institutions participated with a total of 39 batches registered for the paper presentation competition, which aimed to enhance their communication skills and help students overcome stage fear.

## CALL FOR APPLICATIONS: 2024 MGA INDIVIDUAL AWARDS

**Deadline 15 September** 

#### **NOMINATE A COLLEAGUE NOW!!**

You can help recognize the efforts of outstanding volunteers by nominating individuals for one of the prestigious IEEE Member and Geographic Activities (MGA) Awards Program.

Each award has a unique mission and criteria and offers the opportunity to honor distinguished colleagues, inspiring teachers, and corporate leaders.

If you know someone who has made substantial regional IEEE volunteer contributions through innovative projects, exemplary leadership, service, or by fulfilling the MGA goals as related to transnational activities, consider nominating them for one of the following awards:

MGA Larry K. Wilson Transnational Award
MGA Diversity & Inclusion Award
MGA Innovation Award
MGA Leadership Award
MGA Achievement Award
MGA Young Professionals Achievement Award

Please visit the MGA Award nomination process to review the nominator guidelines and eligibility requirements. MGA awards are peer-recognized awards and self-nominations are NOT permitted.

Email questions to mga-awards@ieee.org

### IEEE ROURKELA SUBSECTION ACTIVITIES

Ayas Kanta Swain, Secretary, IEEE Kolkata Section

IEEE Rourkela Subsections in collaboration with the Electrical Engineering department of the National Institute of Technology (NIT) Rourkela organized a workshop on 'Applications of ML Techniques in Sustainable Technologies' (AMLST-2024) from 24 - 28 January 2024. This workshop offered a rigorous academic exploration of the complexities, strengths, and benefits of utilizing ML in sustainable technology applications such as Electric Mobility, Energy Management in Renewable Sources, Health Monitoring of Batteries, Waste Management, Biomedical Signal Processing, Agricultural Yield Prediction, etc.. The Subsection also organized a technical Talk on 'Control of Novel Quadrotors' by Prof. Soumya Ranjan Sahoo, Associate Professor at the Department of Electrical Engineering, IIT Kanpur.

A Faculty Development Programme (FDP) on Power Converters for Green Energy and EV Integration (PCGEEI -2024) was also organized from 13 - 17 March 2024 This FDP was specially designed taking into account the recent trends in green energy integration and the electric vehicle charging infrastructure.

IEEE Kolkata Section Industry Applications and Power & Energy Joint Societies Chapter-Rourkela organized a lecture meeting to celebrate IEEE PES Day on 24 April 2024. The speaker was Dr. Dipankar Debnath, Assistant Professor, at IIT Kharagpur.

The chapter also organized a short-term course on 'Application of AI & ML on Renewable Energy and EV Technologies' (AAMREET -2024) from 8 - 12 June 2024. This short-term course was specially designed considering the recent trends in AI & ML applications in the field of Renewable Energy and Electric vehicles with the inclusion of microgrids, energy management, power converters for renewable energy integration, and energy storage systems into the utility grid as well as for the EV charging infrastructure.



Participants at AMLST-2024

## IEEE ISLAMABAD SECTION PANEL OF CONFERENCE ORGAINZERS

Muzamil Mahmood, Chair, IEEE Islamabad Section Young Professionals AG

On 29 April 2024, the IEEE Islamabad Section Panel of Conference Organizers was held at Riphah International University in Islamabad, to discuss best practices for organizing IEEE conferences. The event began with a keynote address by Dr. Muhammad Uzair Khan, Chair of the IEEE Islamabad Section, who emphasized the importance of conferences in advancing research and technology dissemination.

Key sessions included discussions on IEEE Conference SOP, requirements, and recommendations, highlighting the essential guidelines for organizing successful events. Another session focused on pre-conference planning and filling out the conference application, covering crucial steps like setting objectives and budgeting.



The panel also delved into the IEEE Conference Papers Review Process, detailing the peer-review criteria and maintaining transparency. The session on IEEE Conference Publications discussed the benefits of publishing in IEEE Xplore and enhancing the visibility of conference papers. Additionally, the panel addressed detecting and handling plagiarism, emphasizing the importance of integrity in academic publishing. The role of Student Branches (SBs) and Affinity Groups (AGs) in contributing to conferences was also highlighted. The event concluded with closing remarks, summarizing the discussions and encouraging participants to implement the insights gained.



Participants at Conference Quality Management Workshop at Islamabad Section

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#### IEEE SRI LANKA SECTION CELEBRATES IEEE EDUCATION WEEK 2024

#### Lihini Rajapaksha, Section Student Activities Chair, IEEE Sri Lanka Section

The IEEE Sri Lanka Section celebrated IEEE Education Week 2024 with an enthusiastic and impactful event. Held at TRACE Expert City in Colombo on 24 - 25 April 2024, the event was a vibrant hub of learning and engagement, drawing over 500 participants, including students, teachers, undergraduates, tech enthusiasts, and industry stakeholders. The event, powered by the IFS Foundation and supported by various IEEE OUs and partners, including TRACE Sri Lanka and SL2College, aimed to enhance IEEE's brand visibility and foster educational excellence and innovation.

The first day, coordinated by IEEE Sri Lanka Inspire, was dedicated to school students and teachers, featuring career guidance and interactive STEM education sessions. Over 180 school students actively participated, receiving hands-on STEM kits. These activities aimed to spark interest in STEM fields, providing essential insights into future career paths in technology and engineering.



The second day, coordinated by IEEE Techverse Sri Lanka, catered to undergraduates and industry professionals with advanced technical sessions covering trending areas. An industry visit to OREL IT and a panel discussion on emerging technologies provided practical insights and showcased the integration of technology in industry settings. Supporting IEEE entities, the Student Activities Committee, Young Professionals, and technical chapters in the Section enriched the event through Interactive workshops. The R10 Robotics Competition Sri Lanka Finals and STEM stalls from partners, including SLASSCOM, Generation Alpha, and IgniterSpace, added a competitive and hands-on learning element.

# TWO-DAY IEEE INTERNATIONAL CONFERENCE ON SMART DEVICES

#### Anita Gehlot, Head, Research and Innovation, Uttaranchal University

The International Conference on Smart Devices (ICSD) was held at Uttaranchal University from 2-3 May 2024. The conference received 783 article submissions from nine countries, with 95 papers accepted after rigorous review.

Distinguished delegates included Chief Guest Dr. Sibhan Kishen Koul (IIT Delhi), Guest of Honor Dr. Satish K. Singh (IIIT Allahabad), and several other notable academics and industry professionals. Keynote speakers featured Dr. Abhishek Tripathi (The College of New Jersey), Dr. Satish Mahadevan Srinivasan (Pennsylvania State University), and Dr. Avinash Kumar (University of Technology Sydney).

Parallel technical sessions were chaired by experts such as Dr. P.S. Pandey (G.L. Bajaj) and Dr. Brajlata Chauhan (DIT University), contributing to a robust and engaging conference.





Event Highlights from the Conference on Smart Devices Organized by Uttaranchal University



#### **BRIDGING COMMUNITY THROUGH TECHNOLOGY**

Haslina Md Sarkan, Communications/Publicity/Website Coordinator, IEEE Malaysia Section

Led by the distinguished IEEE Malaysia Kuala Lumpur Subsection (IEEEMYKL) Humanitarian Activity Coordinator, Dr. Fitri Yakub, in collaboration with UTM Kuala Lumpur Student Branch Committee, a technology transfer session to explore the fascinating world of Artificial Intelligence (AI), took place at Yan, Kedah.

On 5 May 2024, the transformative event materialised at Sekolah Kebangsaan Haji Nyak Gam (SKHNG). This marked a significant milestone in community engagement and technological education for both IEEEMYKL and SKHNG. The agenda was packed with activities that aimed to bridge the gap between advanced technology and the local community. The session started by focusing on empowering the next generation through in-depth insights into AI. By demystifying AI concepts and applications, the 5 IEEE volunteers involved in the project, facilitated the teachers with the necessary knowledge to navigate and thrive in a technology-driven world.

The teachers and students were introduced to the exciting intersection of AI and the Internet of Things (AIoT). This segment showcased real-world applications, demonstrating how AIoT can revolutionize various industries and daily life, providing practical examples that resonated with the audience.

A key aspect of the session was fostering meaningful connections with the local community. Through hands-on activities and interactive discussions with the teachers, the event aimed to strengthen the bond between the school and the broader technology community.



The session was particularly focused on delivering knowledge and transferring solutions for the school's aquaponic project. This initiative not only aimed to enhance the students' skills but also to provide IoT-based solutions to improve the efficiency and productivity of the project.

By integrating cutting-edge technology, the session sought to ignite a spark of interest in electronics and AI among the students, guiding them towards a future filled with possibilities.

Through these initiatives, we hope to continue inspiring and empowering the next generation of innovators.



Technology Transfer Session Team

#### **ISTEMS 2024 CONFERENCE INAUGURATION**

Md Fahim Ansari, Professor, Graphic Era (Deemed to be University), Dehradun

The International Conference on Innovative Sustainable Technologies for Energy, Mechatronics, and Smart Systems (ISTEMS) 2024 conference was inaugurated on 26 April 2024 at Graphic Era (Deemed to be University), Dehradun. The event featured notable delegates including Chief Guest Prof. (Dr.) S. N. Singh from ABV-IIITM, Gwalior, and esteemed professors Dr. Asheesh Kumar Singh, Dr. J. Ramkumar, and Dr. Satish Kumar Singh.

The conference commenced with a welcome address by Prof. (Dr.) Rakesh Sharma, Pro-Chancellor, and special addresses by university officials. Keynote addresses covered topics like "Digital Twin for Sustainable Power and Energy Systems" by Prof. (Dr.) Asheesh Kumar Singh, "Viksit Bharat 2047" by Prof. (Dr.) J. Ramkumar, and "Recent Al Challenges" by Prof. (Dr.) Satish Kumar Singh.



Awarding the Token of Appreciation for Keynotw Speech

The afternoon included ten parallel technical sessions, an IEEE Young Professionals session by Dr. Varun Kakar, and an IEEE SIGHT session by Mr. Sourabh Ghosh. Day two featured keynote sessions by Prof. (Dr.) P.M. Pathak, Dr. D.P. Singh, and Dr. Krzysztof Blecharz, followed by additional technical sessions and a special session on IEEE Women in Engineering by Dr. Smita Sharma.