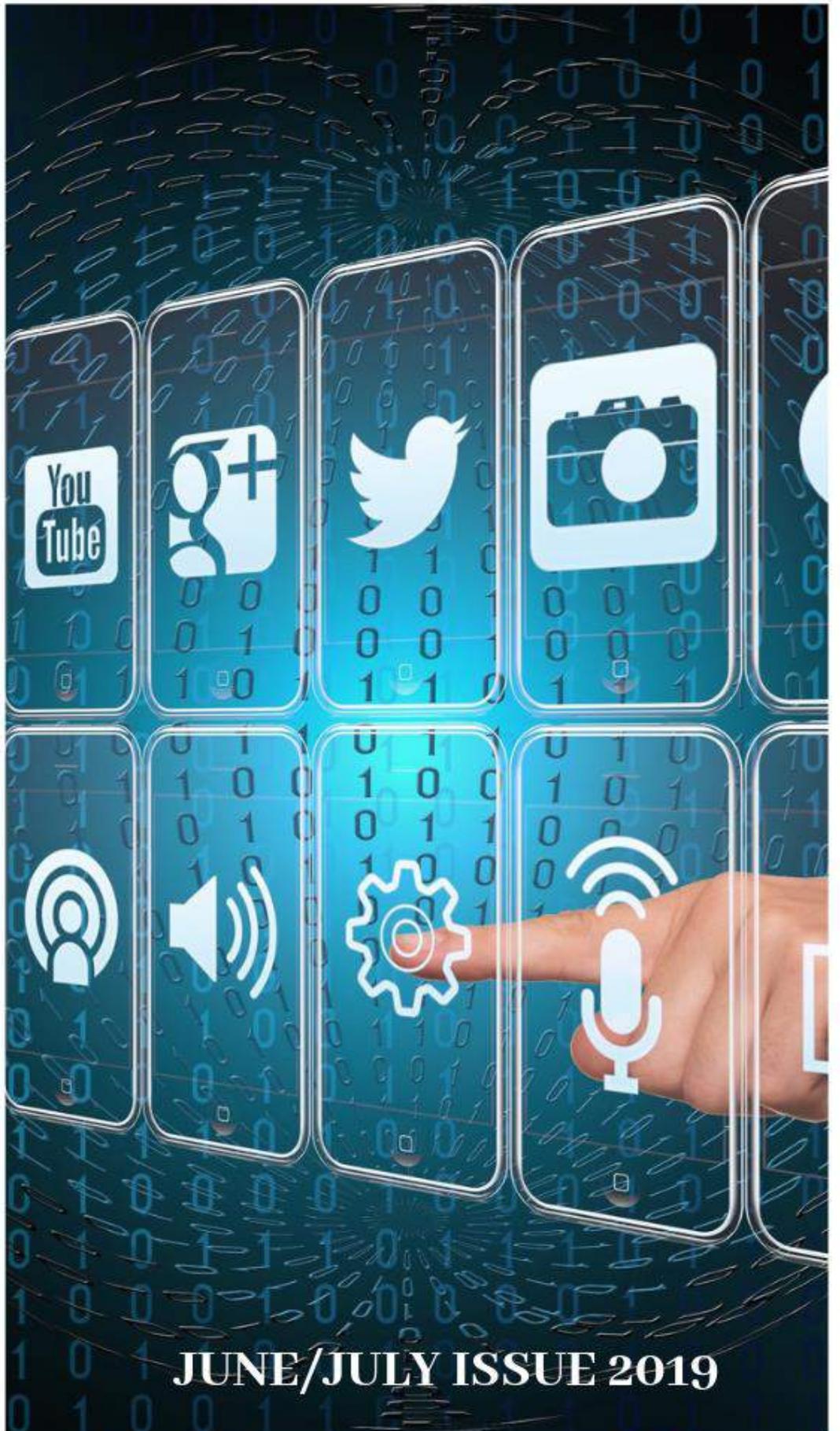


# IEEE R10 TODAY



JUNE/JULY ISSUE 2019

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## WELCOMING MESSAGES

### Message from IEEE Region 10 Director



Dear Region 10 Members,

The first half of 2019 has nearly drawn to a close, during which time IEEE Region 10 has been continuously active. During the past six months more than 600 IEEE-sponsored, or technically co-sponsored, conferences took place in our Region alone.

Moreover, the number of our Organizational Units (OUs) is also increasing. A Northern Territory Subsection within the Northern Australia Section was established in February, and a Chongqing Subsection within the Beijing Section in June.

Region 10 now boasts a grand total of fifty-eight (58) Sections and thirty-four (34) Subsections. Fourteen (14) new Technical Chapters were formed in 2019, making for a total of 697. The new Bangalore and Hyderabad (India), Sendai (Japan), and Thailand Sections “Life Member Affinity Groups” (LMAGs), a new Karachi Section “Women in Engineering” Affinity Group (WIE), and a new Sendai Section Young Professionals Affinity Group (YP) likewise became active this year.

On the other hand, more than 500 Student Branches in our Region 10 have been placed on probation owing to zero members. I do hope all OUs continue to be active, while Section leaders will communicate frequently and assist OUs (Chapters, Affinity Groups, and Student Branches) within their Sections to grow and stay active.

One of the three Region 10 flagship conferences, TENSYP 2019 was successfully held in early June in Kolkata, India. You may view the report in the Region 10 Newsletter. TENCON 2019 is due to be held in Kochi, Kerala State (India), during the period of 17<sup>th</sup> – 20<sup>th</sup> October. The Region 10 HTC 2019 will be held in Jakarta, Indonesia, during 12<sup>th</sup> – 14<sup>th</sup> November. We hope these various conferences will be well attended and, indeed, I myself hope to see many of you there.

The IEEE Milestones Program honors significant technical achievements in all fields associated with IEEE— namely, technological innovation and excellence for the benefit of humanity as found in unique products, services, seminal papers, and patents. By the end of 2018 Region 10 had achieved a total of thirty-six (36) IEEE Milestones (two from India and thirty-four from Japan) out of 193 in the entire world. This year the following two Milestones will be dedicated and confirmed: (1) the High Electron Mobility Transistor, 1979 (Tokyo Section), and (2) the Parkes Radio Telescope, 1969 (New South Wales Section). I am very pleased to note our first IEEE Milestone from Australia. All of us hope that many more Milestones will be proposed in the near future from as many areas as possible of our IEEE Region 10.

The new IEEE Learning Network (ILN) will be launched in July, as a central platform for continuing education across IEEE with a shared learning management system. I hope many of you will take advantage and enjoy this newly inaugurated ILN.

With warmest regards,

Akinori Nishihara  
IEEE Region 10 Director

## Message from IEEE Region 10 Newsletter Coordinator



Dear Region 10 Members,

It is my pleasure to welcome you to the second edition of IEEE Region 10 Newsletter for 2019. For this issue, we received around 40 activity submissions from various organizational units. We would like to thank all these units for their contribution in this newsletter. As you may have known, starting with this issue, we have come up with a more detailed submission guideline in order to improve the submission process and the quality of the articles, as well as to enable contributions from diverse units. Among others, we have limited to only one submission from each unit, increase the word limit for articles from Sections, and roping in the Section chair as endorser for the article submission.

As I mentioned in the previous issue, it is my mission this year to give as much visibility as possible to all Sections and Subsections. For this, we have introduced a new column called the *Organizational Units of the Month*, where in each issue we invited an organizational unit from the Large Section, Medium Section, Small Section, Council, Subsection and Student Branch categories to write about their respective units. Similarly, we also introduced a column on *Personalities of the Month*, where we invited our volunteers to write for the newsletter on their experience and involvement with IEEE. I am very grateful to have received tremendous support from the invited units and volunteers for their high quality submission in this issue.

This second newsletter issue also covers the recently concluded IEEE Region 10 Symposium 2019 (TENSYP2019) held in Kolkata, India. Important highlights from the symposium, including the special track on Women in Engineering (WIE) and Industry Relations Committee (IRC) as well as Student Session, are presented. Besides, this issue also features a column on best practices on humanitarian technology activities from the Indonesia Section, the winner for the 2018 R10 Humanitarian Technology Activities Section Award.

Finally, I would also like to welcome our newest member in the newsletter committee, Prof. Prashant R. Nair, whose biography follows below. I wish to place a special thanks to all the R10 newsletter committee members for their incredible efforts in preparing this second edition. And thanks again to all of you for your support and cooperation.

Mohammad Faizal Ahmad Fauzi  
Chair, IEEE R10 Newsletter Committee

### Prashant R. Nair



Prashant R. Nair is currently an Associate Professor in Computer Science & Engineering and Chairman of Rankings & Accreditation cell at Amrita Vishwa Vidyapeetham (University), Coimbatore, India. He has been visiting faculty at University of California, San Diego and Sofia University, Bulgaria as an Erasmus Mundus fellow. His intellectual contributions include 6 books, 50+ research publications and editorial board memberships of IEEE MAS Link newsletter of IEEE Madras Section, Computer Society of India (CSI) Communications and CSI Transactions journal. He has held IEEE leadership positions such as Chair-Publications, IEEE Madras Section; Vice-chair, IEEE Education Society chapter of IEEE India Council and rendered service for premier conferences such as IEEE India Council International Conference (INDICON) 2018, IEEE R10 HTC 2014 and IEEE All India Student Congress (AISC) 2013. Awards won include IEEE Education Society global chapter achievement award, six CSI Academic Excellence awards and fellowship of IETE.



# SPECIAL REPORT ON TENSYMP2019



# 1. 2019 IEEE REGION 10 SYMPOSIUM (TENSYPMP)

**Written by: Redwan Ferdous Farhan, R10 Newsletter Committee Member**

*IEEE TENSYPMP is one of the flagship conferences of IEEE Region 10. Since 2013, it is being organized each year by different sections within Region-10. This year's edition in Kolkata is the seventh edition of this conference series. Mr. Redwan Ferdous Farhan, a member of the IEEE R10 Newsletter Committee attended the program in person. The following report is produced as an outcome of his physical visit to the conference. In addition to the report, all pictures have also been taken by Mr. Redwan himself.*

With the theme “Technological Innovation for Humanity”, the 7<sup>th</sup> annual edition of one of the signature conferences of IEEE Region 10 (Asia Pacific), IEEE TENSYPMP2019 was organized at the iconic Biswa Bangla Convention Center by IEEE Kolkata Section from 7<sup>th</sup> to 9<sup>th</sup> June 2019. This premier symposium served as a platform to bring together researchers, scientists, academicians, and government personnel to acquire technological and scientific progress. IEEE TENSYPMP2019 was supported by IEEE Region 10, and sponsored by Powergrid Corporation of India Limited (GOLD sponsor), Ericsson, Cisco and Vehere. This three-day long program was decorated with keynote speeches, plenary sessions as well as invited talks, tutorials, technical seminars and paper presentations. Other highlights included panel



*Distinguished guests of IEEE TENSYPMP 2019 along with the organizing committee representatives releasing the conference proceedings. From left to right: Dr. Debangshu Dey, TENSYPMP2019 organizing secretary; Prof. Lawrence Hall, TENSYPMP2019 Keynote Speaker; Prof. Sangha Mitra Bandopdhya, Director of Indian Statistical Institute; Prof. Akinori Nishihara, Director of IEEE Region 10; Mr. Sanjay Kar Chowdhury, Chair of IEEE Kolkata Section and TENSYPMP2019 Conference Chair.*

discussions in various tracks including IEEE Women in Engineering (WIE), Industrial Relations Committee (IRC), and Student Sessions.

220 delegates from various countries and sections of IEEE Region 10 including Bangladesh, India, Thailand, China, Japan and Australia attended the proceedings. 154 papers were presented in 9 tracks which included Signals and Systems, Control Systems and Applications, Robotics & Mechatronics, Computational Biology and Biomedical Informatics, Power & Energy, Emerging Technologies, Machine Learning and Data Analytics, Communication Systems and Computational Intelligence. The symposium commenced with a welcome address by the Chair of IEEE Kolkata Section and TENSYPMP2019 Conference Chair, Mr. Sanjay Kar Chowdhury from CSEC Limited. In his welcome address, he thanked all the participants for their participation and warmly welcomed distinguished inaugural guests of the event, Prof. Sangha Mitra Bandopdhya (IEEE Fellow and Director of Indian Statistical Institute), Prof. Akinori Nishihara (IEEE Fellow and Director of IEEE Region 10 for 2019-2020) and Mr. Deepak Mathur (IEEE Region 10 Director-Elect 2019-2020). Organizing secretary of TENSYPMP 2019, Dr. Debangshu Dey from Jadavpur University proposed the vote of thanks.

The symposium's first keynote speech on "Explorations in Deep Learning from Big Data to Small Data" was delivered by Prof. Lawrence Hall from the University of South Florida, USA. In his talk, he highlighted the trending scenario of successive domination of artificial intelligence and machine learning in different spheres of human life through some realistic case studies and scientific analysis. This was followed by the an invited talk on "Security in Cyber Physical Systems" by Prof. Sandeep K. Shukla of IIT Kanpur, India.

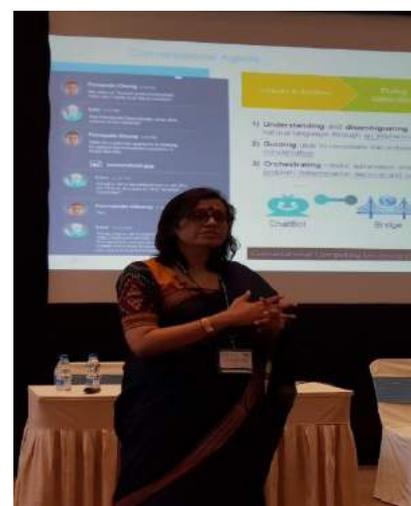


In the afternoon session, two tutorial sessions were delivered by Prof. Sivaji Chakravorti, Director of NIT Calicut and Mr. Chandan Kumar from Power System Operation Corporation. Prof. Sivaji spoke on "Non-Invasive Monitoring of Transformer Insulation by Time and Frequency Domain Methods". Eight parallel sessions as well as two industry talk sessions by Ericsson and CISCO were also conducted in the first day's afternoon session. A special session on TENSYP2020 was conducted by Prof. Celia Shahnaz, General Chair of TENSYP2020 in a parallel session where the invitation to attend TENSYP2020 in Dhaka, Bangladesh was conveyed in front of important and significant personnel from different IEEE sections and committee members, including Akinori Nishihara, IEEE R10 Director 2019-20, Deepak Mathur, IEEE R10 Director-Elect 2019-20, distinguished academicians, past and present Chairs of IEEE Kolkata Section as well as authors and participants of TENSYP2019. The audience praised the detailed presentation and expressed their willingness to attend the conference next year. The first day of the symposium ended with a cultural program and a networking dinner. The cultural program was a mesmerizing music performance by 3 performers on the Sarod instrument.



The proceedings of the second day commenced with the keynote speech on "IoT-based Health, Home Management and Smart City" by Prof. Subhas C. Mukhopadhyay from Macquire University, Australia. This was followed by an invited talk on "AI and Data Science" by Prof. Pabitra Mitra from IIT Kharagpur. Twelve parallel sessions were scheduled on the second day, with the tracks presided by different distinguished chairs and co-chairs.

The third day proceedings of the conference commenced with a plenary lecture on "Cognitive Technical Support" by Dr. Gargi B. Dasgupta, Director of IBM Research, India. This was followed by 2 parallel sessions namely IEEE Industrial Relation Committee (IRC) program panel discussion on "How can IEEE help industry & vice-versa" and Women in Engineering (WIE) session on "Are women still suffering from visibility problem at workplace?". There was also an informative technical session by Mr. B.K. Pradhan, Senior General Manager of Power Grid Corporation of India Limited and a student session of IEEE Kolkata Section with 30 student presentations. Three best presentations were recognized during this session. During this student session also, Mr. Redwan discussed the importance of sharing



news of different student branches, student chapters and affinity groups activities in R10 official newsletter. He also explained the submission process and requested SB officers to regularly submit their reports.



*Mr. Redwan Ferdous is requesting SB representatives to submit their activities report in IEEE R10 newsletter (left). Participants of student branch track in IEEE TENSYPM 2019 (right).*

In the evening of the third day, the closing ceremony of this well organized conference was held. The closing ceremony was presided over by the IEEE R10 Director, Prof. Akinori Nishihara and Conference Chair Mr. Sanjay Kar Chowdhury. Some participants gave their feedback and Mr. Chowdhury thanked all delegates for their excellent participation. The organizers also placed their hearty gratitude to all the supporters and sponsors of the event.



Some more selected photos of the event in the next page. The rest of the photos taken by Mr. Redwan can be found at this link: <https://bit.ly/2WW38hV>.



*(Left) Prof. Akinori Nishihara, Fellow IEEE, Director of IEEE Region 10 for 2019-20 is delivering his welcome speech at IEEE TENSYP2019*

*(Bottom) IEEE Kolkata Section Chair and the TENSYP2019 Conference Chair, Mr. Sanjay Kar Chowdhury is paying his thankfulness to the distinguished guests and all the attendees.*



*(Top) TENSYP2019 Technical Tracks*



*Prof. Sandeep K. Shukla is delivering his invited talk on security in cyber-physical systems*



*Prof. Pabitra Mitra was answering participant queries on AI based automated driving cars*

All the photos of the above-mentioned link are subject to ©copyright by the owner.

## TENSYMP2019 Women in Engineering (WIE) Track

Written by: Sudipta Chatterjee, Chair of WIE Kolkata Section

IEEE Women in Engineering (WIE) Kolkata Section successfully organized the WIE Track on 9<sup>th</sup> June, 2019, at Biswa Bangla Convention Center, Kolkata during the final day of the prestigious IEEE Region 10 Symposium, TENSYP 2019. A panel discussion on the relevant and emerging topic of “Are women still suffering from visibility problem at workplace?” was organized with the participation of around 100 women professionals.

The track started at 11:00 AM with an Inaugural Session. In this session, WIE Kolkata Section Chair, Prof. Sudipta Chatterjee, briefly introduced the IEEE Kolkata Section and its Women in Engineering (WIE) Affinity Group to the audience. She mainly emphasized on the intake, retention and visibility of women engineers. IEEE Region 10 WIE Coordinator, Ms. Emi Yano through her video message highlighted on the need for putting in cumulative effort of male and female engineers for a better world.



*WIE Kolkata Section Chairperson, Prof. Sudipta Chatterjee addressing the audience*

The panel consisted of eminent professionals from various fields - Mrs. Antara Acharya IAS, CEO, KMDA with additional charges of CEO, Sector - VI ITA and Project Director, WBSPMG; Dr. Amit Chaudhuri, Group Head, ICT & Services, CDAC, Kolkata; Dr. Gargi B. Dasgupta, Director, IBM Research India & CTO, IBM India and South Asia, Bangalore and Mrs. Sudeshna Mukhopadhyay, Chief Design Officer, IBahn Illumination Pvt. Ltd., New Delhi. The Panel Discussion was ably moderated by Dr. Gargi Chatterjea, Executive Director, Regulatory Affairs and Corporate Services, CESC Ltd., Kolkata.



*Panel members' views on "Are women still suffering from visibility problem at workplace?"*

Mrs. Antara Acharya expressed that it is the competency of a woman professional which enhances her visibility in the profession. Although at the grassroots level, this visibility issue is not dominant, at the top level, visibility of women could be improved further by improvising proper support system for domestic work. Dr. Amit Chaudhuri was in agreement with this. He also added that although in ICT services, the scenario is not that alarming, a woman-friendly environment in the society could make this situation better. Dr. Gargi B. Dasgupta suggested that to resolve the conflict between the

professional role and the role of a woman is by simply prioritising the situation as it emerges. In this context, help from male colleagues in proper time can act as a boon. Mrs. Sudeshna Mukhopadhyay strongly placed her view that visibility problem does exist in production or process industry. The dedication, passion of accepting challenges in profession, and mobility make a woman more visible in workplace. Dr. Gargi Chatterjea effectively summarized the proceedings. The interactive session between audience and the speakers added an additional dimension to this event. The event ended at 1:00 PM with the vote of thanks proposed by Dr. Bratati Mukhopadhyay, Vice Chair, WIE Kolkata Section. The event was anchored by Dr. Ankita Pramanik, Secretary, WIE Kolkata Section.



*WIE Kolkata Section Chair, Prof. Sudipta Chatterjee is handing over the memento to Mrs. Antara Acharya*



*Kolkata Section Chair, Mr. Sanjay Kar Chowdhury is handing over the memento to Dr. Gargi Chatterjea*

Overall, the Panel Discussion was highly beneficial to the participants. The expert opinion from the eminent speakers could highly motivate every individual present. WIE Kolkata Section acknowledges IEEE Region 10 WIE for its financial support for organising this event and to IEEE Kolkata Section for providing refreshments to the participants.



*WIE members and speakers along with the participant*

## TENSYMP2019 Industry Track

Written by: Iti Saha Misra, Pallab Ganguly and Redwan Ferdous Farhan

IEEE TENSYP 2019 Industry Relations Committee (IRC) Panel Discussion was held on 9<sup>th</sup> June 2019 on the theme, "How IEEE can help Industry and vice-versa?". The panel discussion was moderated by IEEE COMSOC Chairman, Mr. Pallab Ganguly, who was also the Industry Liaison Chair of the Conference. This track was supported by IEEE COMSOC & NASSCOM. The eminent panelists were Mr. Sandeep Sengupta (Director, ISOAH), Mr. Sanjay Das (Jt. Secretary IT & E, Govt of West Bengal), Mr. Partha Sengupta (Senior VP, ITC Infotech), Mr. Sanjay Prasad (CIO, CESC LTD), Dr. Sourav Dutta (CTO, PAYBACK, an AmEx Company) and Mr. Rana Pratap Sircar (Head of Innovation, Ericsson Digital Services SDU India). The panel was graced by the presence of IEEE Region 10 Director, Mr. Akinori Nishihara and actively supported by COMSOC Kolkata Chapter Immediate Past Chair, Prof. Iti Saha Misra.

The deliberations of the panel discussion are summarized as follows:

1. IEEE student members must focus on research to create Intellectual Property (IP). In which case, they do not have to run behind companies for jobs, but companies will run after them to buy the IP.
2. Research needs to be more people-centric, rather than device-centric. Machine learning & artificial intelligence helps machines to learn people's behaviour and patterns. Anomaly detection is the key. Unfortunately, only few papers have been published in this area which only focus on information security.
3. While industry is reactive and responsive, IEEE should be proactive. Companies cannot wait till the cyber-attack has started (as in the case of Firewall, IDS, IPS, AV). Security needs to be based on predictive analysis. That's the correct "culture".
4. Technology needs to be applicable to the Indian (local) context. Something that works abroad may not work here. That is the major reason why we are buying foreign products but still not fully secure.
5. In IEEE Conferences, industry papers should be welcomed and industry participation should be encouraged.
6. The membership development program should be actively promoted in the industry in addition to academia.
7. Jointly, the industry and academic institutions should start collaborative research to develop solutions to combat the proprietary cost incursive products from the OEM.
8. Students should be given more insight into the live industry functions rather than legacy vocational training.
9. Last but not the least, the government should also be proactive rather than reactive in collaborating with IEEE and different industry verticals to come out with fruitful solutions.



*From left: Mr. Pallab Ganguly, ComSoc Chair, Mr. Sandee Sengupta, Mr. Sanjay Prasad, Mr. Sanjay Das, Dr. Sourav Dutta and Mr. Rana Pratap Sircar*

## Interview with IEEE TENSYP2020 General Chair



Celia Shahnaz,  
**General Chair, TENSYP 2020**  
Professor, Department of EEE,  
Bangladesh University of Engineering and Technology (BUET),  
Chair, IEEE Bangladesh Section

**IEEE R10 Today:** First of all, congratulations to IEEE Bangladesh Section for being selected for hosting the next IEEE TENSYP in 2020. Please tell me, about the process you have followed from applying to become the host until getting the acceptance so that the future potential sections can benefit from.

**CS:** IEEE R10 sent an announcement titled Expression of Interest for hosting TENSYP 2020 to all valued Section Chairs and Council Chairs of R10 in 2018. I discussed this to our section Excomm, led the proposal and submitted it by filling up the form prescribed by R10 in 2018. In mid-January 2019, R10 sent me a notification that R10 director has approved our proposal for hosting TENSYP 2020.



**IEEE R10 Today:** In your opinion, why this signature event IEEE TENSYP 2020 is important for R10 members?

**CS:** It is a flagship conference of R10, where the first rate original research (from academia and industry) findings will be presented and discussed. It is a great networking and collaboration opportunity for R10 members that will add value to their innovative minds.

**IEEE R10 Today:** How are you planning to decorate the program, both technical and general?

**CS:** The program is tentatively planned with keynote and invited talks, technical paper and poster presentations, hack-a-thon and project competition for students, Young Professionals (YP) forum, Women in Engineering (WIE) track, Industrial Panel, IEEE SIGHT Groups Activity Presentation, Training on Social Return on Investment & SDGs, IEEE Society Specific Activities, Ignite Session, Exhibition and Live Demo. Awards/Travel Grants and City Tour will be arranged as part of the registration benefit.

**IEEE R10 Today:** How do you think IEEE TENSYP 2020 will have considerable amount of technical impact?



**CS:** IEEE TENSYP 2020 will cover diversified technical and professional areas to meet up the interest of not only authors, but also students, YP, WIE, industry experts and enthusiast in humanitarian technology from R10 sections and other IEEE regions. Thus it will create a great technical impact on the wide range of community and eventually contribute to the IEEE membership development and retention.

**IEEE R10 Today:** Please say some words for the R10 members to invite them in IEEE TENSYP 2020

**CS:** I invite all R10 sections to contribute in our endeavors of building TENSYP2020 as the pride of R10. Please find links for video messages from the R10 Director and the TENSYP2020 General Chair.

R10 director Akinori Nishihara : <https://www.youtube.com/watch?v=nd7NiL-padY> and  
 Celia Shahnaz: <https://youtu.be/LHKXKRKTC1g>





# SECTION / SUBSECTION / COUNCIL ACTIVITIES



## 2. SECTION/SUBSECTION/COUNCIL ACTIVITIES

### Bangladesh Section

#### Campaign for Smart City in Bangladesh and IEEE Bangladesh Section Meet the Media Raihan Ur Rashid, Secretary for IEEE Bangladesh Section

IEEE Bangladesh Section has officially launched its one of the largest new initiatives of 2019 'Campaign for Smart City in Bangladesh' with the slogan: 'Smart thinking and smart technology for achieving a smart city for smart Bangladesh' with the inaugural event on 30<sup>th</sup> May 2019 during 2-7 pm at Robi Corporate Office, Dhaka.

This Campaign is planned to conduct in three phases. The first event is in a train the trainer format. In the next phase, policy makers, government and non-government organizations, industries and other stakeholders will be involved in detail feedback sessions. In the final phase, some recommendations and concept models will be presented to the policy makers.

Eight Excom, Six Team Leads, 40 Ambassadors and their teams have started working on various areas of the Smart City and presented their initial findings. Professor Dr. Celia Shahnaz, Chair, IEEE Bangladesh Section, Campaign Initiator, presented the road map for the campaign to the audience.



The Keynote Speaker of this event, Dr. Saifur Rahman, President, IEEE Power and Energy Society and Professor, Department of ECE, Virginia Tech, USA talked on building an IoT Based Smart City, focusing on Smart and inter-connected transportation systems, following the vision of smart architecture and power managements. He shared his valuable experience in the design and planning of smart city initiatives taken in various countries.

Shihab Ahmad, Chief Digital Services Officer, Robi Axiata Limited highlighted on a number of initiatives taken by Robi that includes the elements of Smart City. Dr. Khan Arif Wahid, Professor, Department of ECE, University of Saskatchewan, Canada spotlighted on drone-to-drone networking, Big Data analytics, wireless sensors and security concerns in a Smart City's aspect. Dr. Asif Islam Khan, Asst. Professor, School of ECE, Georgia Tech, USA, mentioned the influence nanotechnology has for building a Smart City.

Convener of the campaign, Professor Dr. Shaikh Anowarul Fattah, Ex-Section Chair and current N&A Chair discussed various sectors of smart city on which our volunteers have started working with a view to develop comprehensive models that may help the policy makers to solve the existing problems with smart and effective ways.

Another new initiative taken by IEEE Bangladesh Section is an engagement event with local media “IEEE Bangladesh Section Meet the Media and Iftar” on 25<sup>th</sup> May 2019. The goal of the event was to strengthen the relationship with local print/electronic media so that section activities and achievements are effectively disseminated. This event helped the section publicizing its achievements in several news outlet including the Daily Observer.

IEEE Bangladesh Section, WIE AG BD and PES IEEE BUET SB Chapter celebrated the second global IEEE PES Day on 27<sup>th</sup> April at BUET. Arun Kumar Saha, MD of EGCB presented the keynote talk. Zarifa Khatun, Executive Engineer at BPDB, Tasnuva Binte Anowar, Assistant Engineer at DPDC, Pramiti Anasuya Alam, AGM for Energypac Ltd, Farah Nazifa, Data Analyst for SOLshare, Dr. Md. Raju Ahmed, Professor at DUET and Professor Dr. Shaikh Anowarul Fattah, Long-Range Planning Committee member, IEEE PES and Education Chair, IEEE HAC were guest speakers of the event. Dr. Celia Shahnaz, Chair for IEEE Bangladesh Section moderated the event.

## Sri Lanka Section

### IEEE Sri Lanka Section AGM

#### **Rajitha de Silva, Editor for IEEE Sri Lanka Section**

The Annual General Meeting (AGM) of IEEE Sri Lanka Section was held on 16<sup>th</sup> January 2019 at Hilton Colombo Residences with over 100 participants. Prof. Chandimal Jayawardena was appointed as the Chairman for the term 2019/20 and Prof. Ruwan Gopura will be serving as the Chairman Elect. Dr. Jeevani Jayasinghe will be the Secretary for the new term while Prof. Udayanga Hemapala took the position of the Treasurer. The newly elected chairman addressed the gathering and he outlined his plan for the section during the upcoming term. Also during the AGM, the winners of the IEEE Sri Lanka Section electronic design competition and the volunteers for IEEE Sri Lanka Section Student Activities Committee were awarded with certificates of appreciation for their efforts. The meeting was adjourned following the vote of thanks and the floor was open for the fellowship of participants.



## Bombay Section

### IEEE Bombay Section First National Hackathon

**Saurabh Mehta, Convener for IEEE Bombay Section**

The 1<sup>st</sup> National Level Hackathon of IEEE Bombay Section hosted by IEEE-VSIT was a non-stop 24 hours intense competition where teams from twenty five colleges participated for completing their projects and winning certificates, trophies and cash prizes worth ₹70,000. This hackathon was also open for non-IEEE members as well, and the teams had to go through a rigorous selection process based on the project ideas they submitted. Twenty-one teams out of seventy made it to the final competition to build their projects keeping in mind the challenging twist that was revealed to them on the day of the competition. Dignitaries from IEEE Bombay Section were present throughout the event for guiding the teams and evaluating their progress during the hackathon. The participating teams were divided into two domains, Software and Hardware.



## Kerala Section

### PELS SB Chapter Inauguration and Lecture Series

**BIJU K, Secretary for IA/IE/PEL Jt. Chapter Kerala Section**

IA/IE/PELS Joint Chapter of Kerala Section organized the inauguration of the recently formed PELS Student Chapters and conducted talks for the three student chapters during March 2019. The resource person was Dr. Sanjib Kumar Panda, Professor at the National University of Singapore (NUS) and PELS Asia-Pacific Regional Chair.



### 1. GEC Kannur

The inauguration of IAS and PELS student chapters of IEEE SB GCE Kannur took place on 11<sup>th</sup> March 2019. 63 IEEE members attended the program.

### 2. GEC Thrissur

The PELS student chapter of Thrissur (GECT), Thrissur, was inaugurated on 12<sup>th</sup> March 2019 by Dr. Sanjib Kumar Panda. 32 IEEE members attended the program.

### 3. CE Karunagappally

The PELS student chapter of CE Karunagappally was inaugurated on 13<sup>th</sup> March 2019. Prof. MuhammedKasim S was present. 35 IEEE members attended the program.

## Islamabad Section

### IEEE Islamabad Section Industrial Biennale 2019

#### Muhammad Ahsan Farooqui, Industry Relations Chair for IEEE Islamabad Section

This year, IEEE Islamabad Section Industry Relation Team organized “Industrial Biennale” which was hosted by IEEE Bahria University Student Branch on 13<sup>th</sup> April 2019. Industry representatives from over 16 companies participated in this event to make it a great success. Many student branches from Islamabad Section participated in this event. Representatives from esteemed companies of all over the country introduced their companies, briefed about their business and what students should learn before they graduate. Many other topics like professional CV development, recruitment process, interview tips etc. were also discussed in this event. The targeted audience were 3<sup>rd</sup> and 4<sup>th</sup> year engineering students of different universities where the main focus of Industrial Biennale was on job seeking process. The response from the students was overwhelming. During the networking session between the Industry Relation team and the company representatives, the changes that are required for academia were also discussed.



### Outreach Series Program

#### Noshewan Shoaib, Chair for IEEE MTT/APS/EMC Joint Chapter Islamabad Section

RF & microwave is a very specialized research area that deals with the design & development of devices operating in radio frequency spectrum. The development cycle of microwave devices requires dedicated software packages and sophisticated equipment which are typically very costly, especially for Pakistan where only very few universities have the facilities to pursue RF & microwave activities. In this context, Dr. Noshewan Shoaib introduced an outreach series program, in which he visited several universities in Pakistan including the COMSATS Wah, UET Taxila, Institute of Space Technology (IST), HITEC University, Air University and Riphah University. During these visits, Dr. Shoaib delivered talks on

RF energy harvesting in addition to IEEE chapter outreach. The talks were well attended by students and faculty members. It is expected that more students will join the RF & Microwave research field.



## Nagpur Subsection

### Workshop on Agile Way of Working and Design Thinking

**Richa Khandelwal, Secretary for IEEE Nagpur Subsection**

A six-day IEEE workshop on Agile Way of Working and Design Thinking was organized from 20<sup>th</sup> – 25<sup>th</sup> May 2019, under the aegis of IEEE Nagpur Subsection, along with the support of TATA Consultancy Services as knowledge partner. It was conducted by renowned Ninja Agile Coach Mr. Prasanna Deshpande. Senior Professors from reputed



colleges of Nagpur such as RCOEM, GHRCE, YCCE, SVP CET and CCOEW attended the workshop.

Each group of participants was led by a Product Owner. The product life cycle design process was ably supported by Product Owners drawn from Academia and Industry like Dr. Preeti Bajaj, Mr. Kuldeep Rana and Mr. Pranav Chauhan. Mr. Ranjit Singh, Vice Chair-Industry Relations IEEE Nagpur Subsection was also present throughout the workshop. All the presentations were judged by Mr. Arvind Kumar, Chair-IEEE Nagpur Subsection. The participants' feedback gave big thumbs-up to the fabulous organization of workshop, in-depth course content and its impactful delivery.



# AFFINITY GROUP ACTIVITIES



### 3. AFFINITY GROUPS (WIE/YP/LMAG/CNAG) ACTIVITIES

#### Bangladesh Section WIE AG

##### World Health Day Celebration 2019

##### Anamika Bhakta, Chair for IEEE Bangladesh Section WIE AG

IEEE Bangladesh Section (BDS), IEEE BDS Women in Engineering Affinity Group and IEEE SIGHT group FLASH organized the “World Health Day 2019 Celebration” at BUET on 7<sup>th</sup> April. The theme of the event was “Universal Health Coverage: Everyone, Everywhere”.

Prof. Dr. Celia Shahnaz, Chair of IEEE BDS, and Founding Chair of WIE AG of BDS moderated the event. 39 accomplished professionals from more than 13 institutions joined the event. Rumana Ali, Member of the Parliament, People's Republic of Bangladesh, Dr. Fariha Haseen, Dr. Samsad Jahan, and Dr. Tanzina Hossain attended the program as honorable speakers to make this event a success.

Prof. Dr. Celia Shahnaz shared some outstanding projects done under her supervision. She demonstrated the design and implementation of automated heart rate monitoring and injecting device with precise vein detection, low-cost digital stethoscope for remote personalized health care and Smart Hat, z safe and smooth walking assistant for elderly people.



#### Sendai Section WIE AG

##### 2<sup>nd</sup> Anniversary of Sendai WIE

##### Qiaowei Yuan, Chair for Sendai Section WIE AG

The 2<sup>nd</sup> anniversary of Sendai WIE was celebrated in Tohoku University on 16<sup>th</sup> April 2019. The ceremony was cosponsored by Sendai Section and Japan Council WIE and opened with the talk “Research and Gender-Experiences in Industry and Academia” presented by Prof. Nahoko Kasai from Tokyo Metropolitan University. Based on her more than 20 years working experience in the company, Prof. Kasai explained how the society is changing regarding gender issues. After that, the ceremony had three panelists discussing carrier and gender. The short speeches on “Change Usual and Decide Your Life by Yourself” by Emi Yano (R10-WIE-coordinator), “KSWE and I” by Prof. Chaoyang Li (Kochi University of Technology) and remote participation of Prof. Kyoko Okudaira (The University of Aizu),

broadened the attendee’s horizons. Although Sendai WIE is only 2 years old, it is growing fast and will expand greatly for the coming years.



## Islamabad Section WIE AG

### Brain-Machine, Artificial Intelligence and the Future of Biomedical Engineering Solutions for Health

**Rabia Khalid, Secretary for Islamabad Section WIE AG**

The science-fiction of blending man-machine like 'The-Six-Million-Dollar-Man' and 'The-Terminator' on screen is quite familiar to us for decades. Dr. Naweed Syed, a Pakistani-Canadian scientist estimates science-fiction type 'Machine-Men' may be developed within 10-20 years, using his silicon-chip.

Time lining the way into future, Dr. Naweed presided the session on "Brain-Machine, AI and the Future of Biomedical Engineering Solutions for Health" on 7<sup>th</sup> March 2019. He enlightened how the “NeuroChip”, the enabling communication between the human tissue and an electronic device, is a core invention towards the possible reality of sci-fi machine-men. The session was steered towards how this pioneering innovation could open endless opportunities for research of integrating machines with human brains to control artificial limbs, monitor people's vital signs, correct memory-loss and possibly find cure for diseases. It was due to the efforts of IEEE WIE Islamabad Section and the collaboration with the National Incubation Center and Teamup that this innovation and curiosity came under one roof.



# Islamabad Section YP AG

## Young Professionals Islamabad Activities

**M. Saeed Ul Hassan Raza, General Secretary for IEEE Islamabad Section YP AG**

IEEE Young Professionals Islamabad successfully conducted the following events and initiatives:

(1) Executed the idea to guide student volunteers through IEEE dynamic program (STEP) for facilitating transition from Student member to Young Professional. This was done by introducing the opportunities and benefits of IEEE and Young Professional membership by speakers M. Moeiz Chaudhary and M. SaeedUl Hassan Raza, in collaboration with IEEE CUST Social Educational Carnival 2019 (ICSEC 2019) which was a National Event held at CUST University, Islamabad.

(2) Introduced Freelancing on Fiverr multiple series workshops, in collaboration with IEEE Comsats Wah Student Branch. The aim of the workshop is to assist students in learning modern freelancing and earning skills, and professional transformation of university students by speakers Ahsan Raja and Ammar Qureshi.

(3) A seminar on “How and Why to join IEEE and YP Benefits and Opportunities” by speakers M. Muzamil Mahmood and M. SaeedUl Hassan Raza at IEEE Comsats Wah SB resulted in successful membership development and retention of IEEE Members.

(4) A seminar on “Artificial Intelligence and Machine Learning” by speaker Dr. Mudassar Abbas, in collaboration with IEEE Computer Society, PIEAS.



## Tokyo Section YP AG

### Workshop on See, Hear and Touch the Exciting Science!

**Takashi Yoshida, Chair for Tokyo Section YP AG**

IEEE Tokyo Section Young Professionals (Tokyo YP) organized a workshop for elementary school students entitled "See, hear and touch the exciting science!" on 9<sup>th</sup> March 2019 in Yokohama, Japan. "Lucky" 51 participants enjoyed the workshop because there were more than 140 applicants.

Each student chose and joined the experiment from 7 themes; light string telephone, monochrome spinning top colorization by an optical illusion, visual effects, wind power energy (IEEE TISP program), electronic musical instrument, electric power generation, and robot hand. The workshop was wrapped by children's smile.

86% and 12% of participants responded to the survey after the workshop as "very satisfied" and "satisfied", respectively. This is the second time Tokyo YP had organized this workshop for elementary school since 2018. We hope to continue such workshop because we got the power and motivation from children, and also we are pleased to educate future scientists.





# STUDENT BRANCH ACTIVITIES



## 4. STUDENT BRANCH ACTIVITIES

### RUET Student Branch [Bangladesh Section]

#### IEEE PES Day-2019 Celebration

**Arefin Islam, Student Coordinator for IEEE RUET Student Branch**

On 28<sup>th</sup> April 2019, IEEE RUET Student Branch has successfully celebrated the PES RES for Kids Project in Bangladesh through a coloring competition named "Coloring a Greenified Future" at Vertex School, Rajshahi. This project was a part of the Global PES day Celebration by IEEE RUET Student Branch.



The PES RES for kids is part of the PES Networking without Borders (NwB) project driven by PES volunteers across the world. Our volunteers along with the PES Day Ambassador have arranged the program in the school. Around 50 students from lower classes joined the program and draw different pictures based on the theme of green earth. We are pretty delighted to have such wonderful co-operation of members and little students to make the celebration of PES Day a memorable and successful one.

### University of Asia Pacific Student Branch [Bangladesh Section]

#### Drone Making Workshop and Line Follower Robot Competition

**Jannatul Ferdous Jumma, Documentation Coordinator for IEEE University of Asia Pacific SB**

IEEE University of Asia Pacific (UAP) student branch along with Project Club EEE, UAP organized a 'Drone Making Workshop' on 27<sup>th</sup> April 2019. With participation of 52 students from UAP, the workshop was conducted by THRUST, a free robotics school in Bangladesh and supported by Rotor Solution, Bangladesh. It was a hands-on session well received by the enthusiastic participants.



With the motive to evolve teams interested in robotics and mechatronics, IEEE UAP SB and Project Club EEE, UAP jointly organized an event on "Line Follower Robot Competition" on 12<sup>th</sup> May 2019. Through minute scrutiny among 11 teams, "UAP\_WALL-



E\_BOT” and “UAP\_ALIEN\_BOT” were declared as champion and runner-up, respectively and were awarded with prize money. Prof. Dr. M. R. Kabir, Vice Chancellor of UAP was present as the Chief Guest while Dr. Tapan Kumar Chakraborty, Head of the EEE Department presided over the program.

## NSU RAS Student Chapter [Bangladesh Section]

### The Arduino Generation 2019

**Mohammad Rayed, Secretary for IEEE NSU RAS Student Chapter**

On 16<sup>th</sup> March 2019, IEEE NSU Robotics & Automation Society, in collaboration with IEEE NSU Student Branch, celebrated “Arduino Day” by organizing a project showcase & poster competition named “The Arduino Generation 2019” at Exhibition Hall, NSU. The event was recognized by Arduino and celebrated as a part of the global “Arduino Day”. Enthusiastic students demonstrated their home automation prototypes built using Arduino and presented their ideas in posters. The projects were judged on the basis of creativity, effectiveness, sustainability and overall presentation. Team “Robo Curious” was announced as the winner for this competition. The event ended with handing over prizes and certificates to the winners and all the participants, followed by a cake cutting ceremony.



## HMR Institute of Technology & Management Student Branch [Delhi Section]

### Project Oriented Learning with IEEE HMRITM

**Ramneek Kalra, Chair for HMR Institute of Technology & Management Student Branch**

IEEE HMRITM is happy to announce its most active sessions till now with the conduct of several events. “NLP using Google Actions” was held on 24<sup>th</sup> Jan 2019, followed by the “Core Python & Machine Learning using Azure” on 12<sup>th</sup> February 2019. Later in February, the “Introduction to International Certification” (Industrial Training) was held on 18<sup>th</sup> February 2019. Our next major events were “CodeBreak 5.0 & CheckCode.h” from 14<sup>th</sup> to 15<sup>th</sup> March 2019, and ResearchThon 1.0 on 15<sup>th</sup> April 2019 for the College Fest. The “Hands-on Experience on AVR Programming”, conducted on 18<sup>th</sup> March 2019, and “How to Write Research Paper?”, conducted on 5<sup>th</sup> April 2019, received heartwarming responses from audience.

For all the events listed above, more than 100 participants in most events had taken advantage of the new learning of technology with a dedicated Project Completion Task at the end. In our events, students also learnt how to walk hand-in-hand with scientific technology and sustainability together because it is the pathway for a better living.



## NSUT Student Branch [Delhi Section]

### HACKNSUT 2019

**Siddhant Banyal, Chair for IEEE NSUT Student Branch**

The Annual TechWeek and Hackathon organized by IEEE Netaji Subhas University of Technology (NSUT) culminated successfully at the NSUT in Delhi from 29<sup>th</sup> to 31<sup>st</sup> March 2019. The two technical talks conducted under the ambit of the hackathon delivered a combination of erudition and inspiration to the audience. The case study competition that was also conducted on 29<sup>th</sup> March witnessed many students brainstorming their ideas over the challenges presented to them.



With a whopping registration count of around 1200 from all over India, HackNSUT turned out to be India's 3<sup>rd</sup> largest Hackathon. As the clock ticked away and the calendar page flipped from 30<sup>th</sup> March to 31<sup>st</sup> March, scores of budding engineers underwent the process of Chips-RedBull-Hack-Repeat. The event was graced by various industry experts from India and around the world. The participating teams were innovative and their projects were extremely relevant to current technological discourse.

# Macquarie University Student Branch [New South Wales Section]

## Industrial Visit: An IEEE Opening Doors Initiative

Khushboo Singh, Chair for IEEE Macquarie University Student Branch

### IEEE OPENING DOORS INDUSTRIAL VISIT

TIME	ACTIVITY
9:30 am	Arrive onsite- Registration
9:45 am	Manufacturing Tour
10:30 am	Morning tea and interaction with EE's
11:00 am	3x ResMed EE's introduce themselves and discuss careers opportunities
11:45 am	Questions from Students
12:00 pm	Talent Acquisition Discuss Intern/Grad Program How to lodge interest in ResMed
12:15 pm	Close

Venue: ResMed  
<https://www.resmed.com/>  
Engineers and Interns:

**Jeff Armitstead PhD** Vice President – Clinical Science & Innovation at ResMed.

*Jeff Armitstead holds degrees in electrical engineering from Queensland University of Technology, and medical engineering from the University of NSW and has over 20 years' experience in respiratory medical devices, both in industry and academia. He currently leads teams in Sydney running early phase research and clinical trials. He also teaches at the UNSW and at the University of Sydney where he holds an adjunct position. Dr. Armitstead also co-chairs the medTech expert group which aims to improve the lives of patients using insight from real world data in respiratory medicine.*

**Rang Zhai** is an Electrical Engineer working in the Sleep Electri Product Development team. She graduated from UNSW with First Class Honours at the end of 2016, whilst working with ResMed through its interns program. Rang Zhai has been key to providing ResMed CPAP devices power solutions and developing its cellular technologies.

**David Buchan** is a Lead Electrical Engineer whom is currently working in Sleep Devices Product Development. David Buchan studied electrical engineering at UNSW. His first position was in the car industry designing custom fire and emergency audio equipment. All this he moved into aviation displays, and finally into the medical device

Registration Link:  
<https://forms.gle/u5mFMXbYnFta6QFN7>

Exposure to industries is a key component for any graduate and postgraduate degree. It not only expands the horizon but also creates a whole new world of opportunities, and springs innovative ideas in the inquisitive minds of future young professionals. Our student branch organized an Industrial Visit to ResMed as part of "IEEE opening doors" initiative.

The event was a huge success with full participation and great manufacturing tour. The interactive product exhibition and presentations captivated the audience. A peek into the place that solves real world problems is quintessential. This was one of the best ventures of our student branch and it turned out to be extremely rewarding. A huge thanks to ResMed at Bella Vista and Adam Panerello for opening the doors of the industry for academia.

## IEEE Macquarie University (MQ) WIE Leadership Summit

Naila Mukhtar, Chair for IEEE Macquarie University WIE AG Student Chapter

IEEE Macquarie University (MQ) WIE Affinity Group organized the "MQ WIE Leadership Summit", in collaboration with local MQ WIE group on 15<sup>th</sup> April 2019, attended by 70 participants. The summit provided an opportunity to the participants to nurture their leadership skills. The whole day event consisted of two set of sessions: Industry and Academia. Industry session started with a keynote talk by



Ms. Tracey Gramlick (Senior Analyst, CSIRO), and in the afternoon, Professor Rose Amal, from UNSW, presented an inspiring talk related to leadership lessons learnt. Both keynote talks were followed by two panel discussions on Leadership in Industry and Academia. Panel members from the senior leadership positions from both sectors shared their exciting experiences and tips to be a good leader. Role model events are of great importance for motivation of women. IEEE MQ WIE also celebrated "International Women Day" on 11<sup>th</sup> March 2019, where five role models from STEM fields shared their success stories.

## MGM College of Engineering & Technology Student Branch [Bombay Section]

### Workshop on Ethical Hacking & Cyber Security

**Niharika Gadhave, Chair for MGM College of Engineering & Technology Student Branch**

THE MGCCET Student Branch conducted a workshop on cyber security and ethical hacking at MGM CET. This workshop is specifically designed to provide the right knowledge to the aspiring Hacking and Cyber Security enthusiasts. This workshop explored the various means that an intruder has available to gain access to computer resources.



Among the contents of the workshop are Introduction to Ethical Hacking; Information Gathering; System and Windows Hacking; Data Hiding Techniques; Hacking by Key Loggers; Trojans, Backdoors & Viruses; Proxy Server and VPN Technologies - Be Invisible; Google Hacking; Hacking Email Accounts & Email Security; Social Networking & Security Policies; Website Hacking and Security Standards; Social Engineering; and Case Studies. The intended audience were students, where first, second, third and fourth year students from all departments attended the lecture. The event also comprised of interactive question & answer session.

## IIT-Kharagpur AP-MTTS Student Chapter [Kharagpur Section]

### Workshop on "Connecting World through Electromagnetics"

**Shuvodip Majumdar, Vice Chair for IEEE IIT-Kharagpur AP-MTTS Student Chapter**

IEEE AP-MTTS Student Branch Chapter of the IEEE Kharagpur Section organized a workshop titled "Connecting World through Electromagnetics" from 26<sup>th</sup> to 28<sup>th</sup> April 2019 at IIT Kharagpur (West Bengal, India) campus. The number of participants was 22 and they belonged to various engineering institutions from all over India. This workshop introduced the participants to the cutting edge technologies like Microwave Passive Components, Microwave Systems, RADAR Communication, Antenna Miniaturization and On-chip Antennas, Optical Metamaterials, Microwave Tomography,

Electronics Packaging etc. Some important modules of a transceiver system were also presented in detail; from concept to simulation, fabrication, and packaging. Simulation of various electromagnetic scenarios using HFSS, ADS, MATLAB and Python were also included. There were talks from IIT Kharagpur faculties and interactive sessions with technical experts from DRDO and other defense organizations of India.



## The Islamia University of Bahawalpur Student Branch [Bahawalpur Sub-Section]

Student/YP/WIE Congress 2019

**Maria Ali, Chairperson, The Islamia University of Bahawalpur Student Branch**



The 3<sup>rd</sup> episode of IEEE Bahawalpur Sub-Section Young Professionals & Women in Engineering Congress 2019 (BSSYWC'19) was held from 29<sup>th</sup> to 30<sup>th</sup> March 2019 at the Islamia University Bahawalpur. It was held with the collaboration of IEEE HAC, IEEE YP and IEEE SPS as international collaborators. The purpose of organizing the congress was to provide a platform for students from more than ten universities of southern Punjab to interact with fellow engineers, professionals, industrialists and intellectual speakers from all over Pakistan. The event commenced with the opening keynote followed by various technical and non-technical activities over the span of two days. Two panel discussions and seminars on Artificial Intelligence, Network Security, Biomedical Image Processing and Renewable Energy Resources got the attention of participants. The number of participants exceeded 350. Overall, the event got positive and encouraging reviews from professionals and other participants.

## UET Taxila Student Branch [Islamabad Section]

### Seminar on "RF Energy Harvesting for IOT Applications"

**Muhammad Saif Raza, Chairperson for IEEE UET Taxila Student Branch**

The IEEE Student Branch of UET Taxila has arranged a seminar on RF Energy Harvesting by Dr. Noshawan Shoaib Abbasi.

Dr. Noshawan guided students about the low-power devices and radio frequency energy harvesting. He explains that RF power harvesting begins with an antenna, and a given antenna can only efficiently harvest power radiated from a close bank of frequencies. The seminar concluded with a question and answer session in which students asked queries about the topic.



### Training Session for Newly Selected Cabinet Members

**Hammad Tariq, Chairperson for IEEE UET Taxila CES Student Chapter**

The IEEE UET Taxila Consumer Electronics Society (CES) Student Chapter arranged a Training Session for the newly selected cabinet members of the UET Taxila Student Branch and Student Chapters (CES and PES) as well as the UET Taxila WIE affinity group on 23<sup>rd</sup> April 2019. 22 students took part in the training session. The training was led by IEEE UET Taxila Counselor, Dr. Gulistan Raja in which the whole structure of IEEE was explained. The cabinet members were also asked to explain their plans on future workshops and events to the Counselor of IEEE UET Taxila. In the end refreshment was provided and group photo was taken in front of the Electrical Engineering Department.



## IEEE PES Student Chapter UET Taxila Activities

**Talha Tanveer, Chairperson for IEEE UET Taxila PES Student Chapter**

The IEEE UET Taxila PES Student Chapter successfully organized several events. Proteus and PCB Designing workshop was organized for the students in which they were taught about the basics of Proteus, PCB designing and its hands-on demonstration. IEEE PES Day 2019 was celebrated on 22<sup>nd</sup> April 2019, where the ceremony consisted of an introductory seminar about PES, the benefits of PES membership as well as future plans.

IEEE PES RES for Kids activity was arranged in a local school. The activity consisted of coloring by the children in color book provided to them. The concept of renewable energy was imparted to the young minds and the children were encouraged to practice them in their daily routine.

Women in Power (WiP) group of IEEE UET Taxila PES Student Chapter organized an educational activity in a local school. The concept of electrostatics was imparted with practical demonstration. The purpose of this activity was to empower women to be the future leaders.



## PIEAS WIE AG Student Chapter [Islamabad Section]

**IEEE WIE Star Session 2019**

**Rabiyya Mir, Vice-Chair for IEEE PIEAS WIE Student Chapter**

The IEEE Pakistan Institute of Engineering and Applied Sciences (PIEAS) WIE AG arranged the STEP session at PAEC Model School on Tuesday, 30<sup>th</sup> April 2019, under the umbrella of WIE STAR Program with the aim of raising awareness among the children. This session was aimed to bring out the creativity within them and give them an open platform to express their talent without having the fear of failure. The activities included 3 games and a quiz. The winners were awarded geometry tools, diaries and stationary items. In addition, candies and chocolates were also distributed among the students. The second episode of STAR session was a career counselling session sponsored by USEFP. It comprised of introductory presentations about science and arts. A test was also conducted to analyze their knowledge and career plans. The high achievers were awarded calculators as token of appreciation.



## COMSATS University Islamabad (CUI) Wah Campus Student Branch [Islamabad Section]

### IEEE Membership Development Drive Spring 2019

**Raamish Khan, Chair Person for IEEE COMSATS University Islamabad Wah Campus Student Branch**

The IEEE COMSATS Wah Student Branch organized a seminar on "How & Why to join IEEE", in which Mr. Muzamil Mahmood (SSR Islamabad Section) and Mr. Saeed-ul-Hassan Raza (General Secretary IEEE Young Professionals Islamabad) were called as a guest Speakers. They motivated the audience and talked on the benefits of IEEE and scholarships. After the seminar, students enquired regarding registration drive for getting membership.

Information desk for one week "Registration Drive SP19" was placed, where students can register for IEEE membership themselves. The main aim of the desk was to raise awareness among students about IEEE, what it does and why should students join the professional body. More than 80 students registered for membership through the information desk.

Interviews of applicants registered in the Registration Drive SP19 were taken, in which more than 60 applicants gave interviews, out of which 47 were selected. Due to the membership development drive, IEEE COMSATS Wah Student Branch got more than 35 new recruited members in Spring 2019.



## MATLAB Workshop, WIE Carnival SP19 and Motivational Seminar

Hira Anzar, Chairperson for IEEE COMSATS University Islamabad Wah Campus WIE Student Chapter

The workshop on MATLAB was held under the flag of IEEE CUI Wah Campus WIE Student Chapter on 27<sup>th</sup> March 2019. The speaker was Dr. Tallah Akram assisted by his student Hafiz M. Junaid Lodhi. This workshop was originally of 2-hours which was then extended to 4-hours by observing the response of the students. The WIE Carnival was held during the student week SP19. Under this event, games were being organized such as tic-run-toc and blow fish. Gift hampers and certificates were awarded. The WIE AG also organized a seminar on "PASSION – THE POWER IN US". The seminar, solely organized by girls, was a 2-hour motivational seminar with Raja Zia Ul Haq as the speaker.



## COMSATS University Islamabad (CUI) Student Branch [Islamabad Section]

### IEEE CUI SPAA

Hasham Hafeez, Vice Chairperson for IEEE CUI Student Branch

IEEE Student's Professional Awareness Activities (SPAA) was a flagship event for IEEE CUI Student Branch. The event took place on the 22<sup>nd</sup> February 2019 at the SSBC Conference Room. Three speakers shared their experiences regarding communication and leadership skills required while working at different organizations. Mr. Abbas Saleem Khan talked about how to get your CV shortlisted, Mr. Hamza Sami discussed how a person can go from working for someone to working for themselves and finally,

Mr. Mujtaba Anwar Chaudhry explained how a person in power should be leading the rest of his team. This whole event served as an instruction manual that the young students in attendance could use to craft a successful career.



## Changing Your Mind Over Matter

**Arisha Wasim, Webmaster for IEEE CUI EMBS Student Chapter**

IEEE Engineering in Medicine and Biology Society, in collaboration with RAS, managed to nail an astounding and wholesome event on 22<sup>nd</sup> May 2019 at COMSATS University, Islamabad. The event was split into two major parts: career development and personality development. Since both of these snags were faced and to be faced by young individuals, both sides were targeted and then interconnected. Renowned media psychologist Mashiayat e Zahra Kazmi spoke on personality development and another distinguished orator Bilal Aslam was invited to center on career development. The session was impeccably handled by the organizing committee and every form of state-of-the-art expertise was used to deliver the session. The presenters entertained everyone's queries until they were perfectly cleared out and the participants were contented. The audience response was very satisfactory which motivated the organizers to conduct more activities in the future. In the end, the speakers were presented with token of appreciation.



## Seminar on Theories, Practices, and Policies Examining Rural Development and Women Empowerment in Pakistan

**Noor Qamar, Secretary, IEEE CUI TEMS Student Chapter**

A Seminar was held on Wednesday, 20<sup>th</sup> February 2019 at the Video Conference Room CUI. The event was arranged by the center policy studies which was hosted by IEEE CUI Technology and Engineering Management Society (TEMS) Student Chapter. The welcome



note was given by Dr. Imran Syed (Head CPS) who welcomed the four guest speakers; Ms. Ayesha Khan (Country Director, Hashoo Foundation, Islamabad), Mr. Israr Muhammad Khan (Director General, AHK National Centre for Rural Development), Ms. Robeela Bangash (Chief Executive Officer, Human Resource Network, HRDN), and Dr. Imran Syed (Head CPS). The speakers talked about the women empowerment and the development issues that exist in Pakistan. The audience actively participated in the session and asked many questions to the speakers. The event was concluded with a vote of thanks given by Dr. Imran Syed to all the guests for their valuable time.

## Developer Student Club Information Session

**Areeb Siddiqui, Vice Chairperson for IEEE CUI CS Student Chapter**

Google has always been effortlessly working to offer young minds the resources they need to succeed in the big leagues. And, in its efforts to do that, the corporation has launched an initiative by the name of Developer Student Clubs. The first university that Google approached to regarding a new



student club was COMSATS University, Islamabad. GCDC Islamabad came into contact with IEEE CUI Student Branch and fast forward two weeks later, IEEE CS scheduled the Google Student Club Information Session. GCDC Islamabad sent one of their lead representatives, Miss Irum Zahra to talk to a crowd of over sixty participants. In her presentation, she shared some details about some of the other Student Clubs around the world. At the conclusion of the presentation, the participants bid farewells to Miss Zahra.



# PERSONALITIES OF THE MONTH



## 5. R10 PERSONALITIES OF THE MONTH

### R10 Personality of the Month – Fawnizu Azmadi Hussin

#### Malaysia Section

Fawnizu Azmadi Hussin became an IEEE member in 2012 and has been actively contributing as an IEEE volunteer from 2009, when he was elected to the executive committee of the IEEE Malaysia Circuits & Systems Society Chapter. After serving in the executive committee in various positions, he was elected as chapter chair in 2013 and 2014. In 2015 and 2016, Fawnizu served as the Communication & Newsletter Coordinator for Malaysia Section. During this period, he edited a book for Malaysia section's 30<sup>th</sup> anniversary celebration. Subsequently as the section's vice-chair in 2017 and 2018, he focused on improving the membership in Malaysia section, which had been on a decline since 2014. During the 2019 General Meeting, Fawnizu was elected as the section chair for a 2-year period (2019 & 2020). For his efforts as an IEEE volunteer, he was awarded the 2018 R10 Outstanding Volunteer Award during the 2019 R10 General Meeting in Melbourne. 18 years as an IEEE member—especially the last 10 years as an active volunteer—has made a significant impact on his professional as well as personal life.

Dr. Fawnizu Azmadi Hussin is currently working as an associate professor in the Electrical & Electronic Engineering Department at Universiti Teknologi Petronas. Between 2014 and 2018, he supported the university's vice chancellor as the Director of Strategic Alliance Office, which required him to engage with several industry and university partners. His administrative duties at this office and his role as an IEEE volunteer mutually aligned, thus enabling him to discharge both the responsibilities effectively.

As part of the membership development initiative for industry members, Fawnizu organized a special Industry Forum during TENCON 2017 conference in Penang, Malaysia. This forum brought together industry leaders from Malaysia and Indonesia in the distinguished presence of the then IEEE President, Karen Bartleson to discuss industry-academic collaboration and the possibility of IEEE to become an enabling platform for the same. In 2017 and 2018, under the MD portfolio, Fawnizu organized senior membership elevation workshops with the chapters at eight and eleven locations, respectively, throughout Malaysia. As a result, 87 members were elevated in 2017 and another 140 in 2018, which is the highest as compared to other sections in IEEE R10.



Another major and challenging initiative led by Fawnizu, after he was elected to the section executive committee in 2015, was the publication of a special book to commemorate the 30<sup>th</sup> Anniversary of IEEE Malaysia Section's establishment. As the Editor-in-Chief, he worked with chapter representatives for one year to compile information and edit the book, which was published in 2016. The book was distributed to all IEEE volunteers in Malaysia and made available for all members as a reference (<http://bit.ly/30yrBook>). This 65-page commemorative publication features the history of IEEE Malaysia section, from its establishment in 1985 and traces the establishment history of the section, its chapters and student branches, major achievements & milestones and a complete history of its leaders and committee members till 2015.



*Receiving the R10 OVA from the R10 Director Prof Akinori Nishihara in the presence of the Past Director, Prof Kukjin Chun.*



# R10 WIE Personality of the Month – Bushra Naeem

## Karachi Section

Bushra Naeem holds a doctorate degree in Electrical Engineering from Malaysia, and Master of Science in Engineering and Management from England. A leading female engineering researcher, she is the founding chair of Women in Engineering Affinity group, Karachi section and IEEE Student Branch Counselor at the Balochistan University of Information Technology, Engineering, and Management Sciences (BUIEMS), Quetta. Her exciting journey with IEEE has numerous bits to share.



After successful conduct of fundraising for the student activities. From left to right: IEEE Senior member & Pro Vice Chancellor BUIEMS, Faisal Ahmed Khan; BushraNaeem; Engineer Adnan Ali.

Her voyage as an IEEE student member started with a course on Cognitive Dynamic Systems, by Professor Simon Haykin in the United Kingdom. IEEE has provided her a platform to stay connected, and actively engage with researchers across the globe and serve the community. A major chunk of her volunteering has been with IEEE. She has published over 15 international articles and delivered numerous keynotes and invited talks in conferences in the USA, UK, UAE and Malaysia. She was also awarded as Exemplary branch counselor, by the Karachi section in 2018 and received the Best IEEE Branch Counselor Award in IEEE Pakistan Congress (PSYWSC 2018). She has organized several seminars, trainings, and fundraising events. She volunteered at WIE ILC 2016 in San Jose; served as session chair in numerous conferences worldwide, and led the finance and publicity committees in the International Conference on Computing, Electronic and Electrical Engineering (ICE Cube 2018).



One-day course on Cognitive Dynamic Systems, by Professor Simon Haykin held at Queen's University Belfast, UK, 2010

Bushra officiates as Head of Software Engineering department at BUIEMS. She is a HEC approved supervisor and holds a certification of “master trainer for Higher Education PhD supervisor capacity building”. She has attended several workshops and professional development trainings including “effective teaching methods” and “Volunteer leadership” in Pakistan, “1<sup>st</sup> Malaysia-Japan Workshop on Radio Technology”, and “particle swarm optimization” in Malaysia, and “Taking Software & Digital Ideas to Market” and “Managing Innovative Technology” at the University of Oxford, UK. She has also served as the lead guest editor in the Journal of Independent Studies and Research – Computing, Special Issue on: “Emerging Wireless Communications vs Social Justice”. She had the honor to receive the “Best Ambassador Award 2019” by the Asian Council of Science Editors in Dubai.



Celebrating International Women's Day 2019



Bushra demonstrating at WIE ILC, San Jose, 2016: I am a change maker because I teach and train the youth for a better tomorrow

To escalate the prospects of her students, she is currently working to strengthen the WIE affinity groups and leading a campaign to establish an IEEE Quetta Section. IEEE R10 extends best wishes to her in her endeavors of educating, training and volunteering.

# R10 YP Personality of the Month – Mayumi Suzuki

## Tokyo Section

Mayumi Suzuki has been an IEEE volunteer since 2008. IEEE volunteering has provided Mayumi several growth opportunities as well as novel and rich experiences and encounters every year. This includes organizational management experience as Tokyo YP Chair, organizing of events not only Tokyo Section but all over Japan, creation of connections beyond generations and positions, panel discussion with Directors in other IEEE Regions and the refreshing opportunity to make several friends in Japan and other countries. She is currently engaged in a research and development project to improve healthcare in an industrial company. She is very passionate about volunteering for IEEE. She aspires to use the IEEE platform to hone her skills, gain overseas experiences and connect with people from diverse walks of life and work. She hopes that this experience would help her find the next sets of the goals in her life and support her during difficult times.



IEEE Day 2018 Party in Tokyo Section from students to life members. We enjoyed traditional foods cooked by ourselves and gorgeous cakes!



Awards ceremony in Tokyo Section board meeting for R10 Best Membership Retention Award - Large Section and R10 Young Professionals Volunteer Award – Industry with Tokyo Section Current and Past Chairs, Past Secretary, LMAG Current and Past Chairs, R10 Past LMAG Chair and R10 Director.



Young Professional Session “Let’s make a better YP!” in TENCON 2018 at Jeju. From left to right, Prof. Babak D Beheshti (R1 Director), Prof. Maik Luiken (R8 Director), Dr. Hussain Mahdi, Mr. Nivas Ravichandran, Dr. Jaeryoung Lee, Ms. Mayumi Suzuki and Dr. Albert No.

*“I think it is the best treasure that I got connection with people who have different goals and jobs, and those who are aiming for self-fulfillment through IEEE. I’m sure these connections will be useful somewhere in my future life and will support me in my difficult times. Even if I become IEEE Life Member, I would like to have a fun experience together while improving each other.*

*Now, everyone, let's take advantage by becoming an IEEE Volunteer! The motivation for activity is not limited; I want to do something new for me, I want to make friends, I want to gain experience overseas, I have extra energy to do something. Let's open up a new world of challenge and growth! It is only you who can enrich your life.*

*I hope that a lot of people will develop their own life and live a happy and fulfilling life through IEEE. Of course, I would like to develop myself and continue to explore the unknown world.”*

- **Mayumi Suzuki**

# R10 Student Personality of the Month – Abhijit Biswas

## Bangladesh Section

Abhijit Biswas completed his Bachelor's Degree in Electrical and Electronic Engineering and Master's degree from Bangladesh University of Engineering and Technology (BUET). He is currently employed as a Lecturer in BRAC University, Bangladesh. He has been an active volunteer from his undergraduate years which began with his involvement in the IEEE BUET Student Branch (SB). As an SB volunteer, he volunteered for IEEE WIECON-ECE 2015 and several programs organized by the SB and Bangladesh Section. He became Program Coordinator (Educational Activities) of BUET SB in 2016 and organized many workshops, seminars, technical talks, outreach programs, humanitarian activities and industrial tours. He also volunteered in IEEE R10 SAC Chair, Counselors and Mentors Meet 2016 and represented the SB in the IEEE R10 SYWL Congress 2016. These efforts led to him being elected as Vice Chairperson of BUET SB.



*Receiving IEEE Bangladesh Section Best Student Volunteer Award during Bangladesh Section Award Night and Annual Dinner 2017*

He led a team of fifty student volunteers as Lead Student Volunteer for IEEE R10 HTC 2017. IEEE R10 HTC was the most successful event in the history of IEEE Bangladesh Section. He also volunteered in Bangladesh Section SYW Congress 2017, Authorship Workshop conducted by Dr. Saifur Rahman, President of IEEE Power & Energy Society, IEEE WIE ILS 2018 held at Dhaka, IEEE Bangladesh Section SYWM Congress 2018, IEEE Bangladesh Section Student Branch ExCom Summit 2018, IEEE Bangladesh Section Vitality Summit 2018, and IEEE Bangladesh Section Award Night and Annual Dinner 2018. He was the Project Manager of 'Demystifying Nuclear Power Technology' project which was funded by IEEE foundation. Under this project, the team reached out to 1000+ students from 14 universities to make them aware about nuclear power engineering and its emerging field in Bangladesh.

After being elected as the Chairperson of IEEE BUET Student Branch, he expanded the student membership and formed four new Student Branch Society Chapters. Subsequently he served as Section Student Representative (SSR) of IEEE Bangladesh Section. As SSR, he worked closely and pro-actively with 38 student branches to organize various activities thereby bringing the Section closer to the students. As SSR, he was part of the organizing team of several R10 funded events including SPAC, SPAVe, SPAW, STEP etc. in 2018. He was also part of the organizing team of PES Day celebration of IEEE Bangladesh Section and IEEE Mini POCO in 2018. He was awarded the Best Student Volunteer Award 2017 from IEEE Bangladesh Section and IEEE BUET Student Branch was awarded IEEE Bangladesh Section Best Student Branch Award 2017 under his leadership. He was also awarded the IEEE Region 10 Student Activity Committee Student Volunteer Award 2018. He aspires to continue his journey of volunteering in IEEE and hopes to make the world a better place by spreading humanity through technology.



# ORGANIZATIONAL UNITS OF THE MONTH



## 6. R10 ORGANIZATIONAL UNITS OF THE MONTH

### R10 Large Section of the Month – Hyderabad Section

Prepared by: N. Venkatesh, Chair for Hyderabad Section

IEEE Hyderabad Section was established on 13<sup>th</sup> May 1984. This Section was formed by upgrading what used to be the IEEE Hyderabad Sub-section that was formed in 1981 with 25 members. It has been very active right from its Sub-section days. **IEEE Hyderabad Section has received the R10 Outstanding Large Section Award thrice in the years 2012, 2016 and 2018.**

Hyderabad city is capital of the Indian state of **Telangana**. It was founded in the year 1591 by Qutb Shahi Ruler. Telugu and Urdu are the local languages of the city. It is the fourth most populated city in India. The climate is warm to hot and monsoonal with moderate annual precipitation. Hyderabad is the only city known as **City of Pearls** as once it was the only global center for trade of large diamonds, emeralds and natural pearls.



The city houses famous historical sites including Charminar, UNESCO Asia Pacific Heritage site of the Chowmahalla Palace, Salar Jung Museum (among the world's largest private collection museums) as well as art galleries, libraries, sports complexes, museums and theaters. Hyderabad is home to the Telugu language movie industry – commonly called Tollywood, which is India's second biggest film industry after Bollywood. Ramoji Film City (RFC) in Hyderabad is the world's largest integrated film studio-cum-theme park, covering 1666 acres. It is also one of Asia's most popular tourism and recreation centers.

Hyderabad has been host to a significant number of public sector research labs and large manufacturing units. From that foundation, Hyderabad has become a hub of trade and commerce, and among the global centers of information technology. Multinational technology firms such as Microsoft (with its largest R&D campus outside of the US), Google, Amazon, Apple, CA, IBM, Oracle, Dell, Facebook, Deloitte, Cognizant, Intel, GE, Schneider Electric and Indian technology giants Tata Consultancy Services (TCS), Infosys, Wipro, others are located in Hyderabad. The city hosts two central universities, three deemed universities, and six state universities. This educational infrastructure attracts students from all over India and some international students.



Volunteers of IEEE Hyderabad section study or work in these organizations or institutions appertain from such IT firms and renowned universities. Over 50% of the Section and Chapter leadership belongs to industry, significantly raising IEEE industry activities and industry-academia interaction. The volunteers contribute significant quality time to IEEE activities and along with the large number of active members in the Section,

consistently keep Hyderabad Section one of the most vibrant ones in the region.

## R10 Medium Section of the Month – Queensland Section

Prepared by: Nilesh Modi, Chair for Queensland Section

The Queensland Section was established in 1985. Today, the section has nine active chapters, three affinity groups and one honour society and over 70 committee members, who include the section executive committee, chapter and affinity groups' officers, student branch volunteers and student councilors. This inclusive approach has been driving the success of the section moving forward.

The Queensland Section is a medium-sized section with approximately 1200 members and growing. In 2018, the Queensland Section organized 70 technical and professional events including technical seminars, workshops, and distinguished lecture seminars that attracted more than 1500 delegates in total. The section continually strives to organize international and local flagship conferences on various topics to increase visibility of the section and encourage members to pursue higher membership status. Currently, there are 13 life senior and 27 life members.



*Annual General Meeting attendance*

Queensland section runs membership development events throughout the year. These events are either intended to recruit new members or retain the memberships. This section also runs membership drive events at various universities to attract new student members. The section supports various student activities in its effort to be visible among potential members. Similarly, the Queensland Section runs a couple of industry membership development seminars every year. These industry events are meant to showcase how IEEE is beneficial to individual's professional development as well as increase awareness of organizational benefits from IEEE. Section also runs senior membership campaign and career seminars in its effort to retain members.

The Queensland section recognizes its volunteers through a number of awards such as outstanding volunteer award, best student thesis award for three categories, and overseas travel awards. The Section also endeavours to discuss with the members in arrears about best ways of keeping in the loop with the IEEE.



*Left: Outstanding volunteer award recipient - Robert Kennedy, Right: Daniel Eghbal*



*Left to Right: Sudarshan Dahal (membership development chair) recognized by Nilesh Modi (section chair)*

The highlights of 2018 were:

- Queensland Section was recognised as the R10 Outstanding Medium Section Award in recognition and appreciation of valued services and contributions.
- Queensland Section was the recipient of the R10 Best Membership Growth Medium Section Award.
- Queensland Section PES/DEIS chapter was awarded Outstanding Chapter runner-up award for the 6<sup>th</sup> time in a row.
- IEEE Queensland Section hosted three flagship international events namely:
  - International Conference on Radar, the world's premier international conference on radar systems;
  - International Conference on Robotics and Automation, the biggest annual IEEE robotics conference in the world, established in 1984; and
  - IEEE Women in Engineering International Leadership Summit (WIE ILS)



*Section volunteers at R10 Meeting*

*Front Row Left to Right: TapanSaha, Alexandra Posoldova,  
Nilesh Modi, Daniel Eghbal*

IEEE Queensland Section URL: <http://ieeegld.org/>

## R10 Small Section of the Month – New Zealand Central Section

Prepared by: Steven Le Moan, Secretary for New Zealand Central Section

The New Zealand Central Section (NZCS) is very proud to receive, for the second time in four years, the R10 Outstanding Small Section Award for 2018. NZCS has been serving IEEE members since 2005 and with currently more than 260 members, it has shown significant growth over the years through the introduction of targeted new Chapters, Affinity Groups, Student Branches and specially supported events. The Section's geographical coverage goes from New Plymouth to Gisborne and all the way down to the southernmost capital city of the world: Wellington. The current chair, Dr. Murray Milner (second from the left in the picture) succeeds Prof. Donald Bailey (second from the right) whose term ended at the end of 2018. Prof. Bailey still actively contributes to IEEE as chair of the New Zealand Council, together with representatives of the North and South sections.



*Dr. Milner and Prof. Bailey receiving the award*



*Young Professionals seminar on career planning at Victoria University of Wellington with Duncan Hall.*

2018 was a busy year for NZCS with many events organized and co-sponsored either directly or through its Chapters and Affinity Groups. From career planning to Distinguished Lecturer seminars, NZCS took IEEE's aim to "foster technological innovation and excellence for the benefit of all" very much at heart. Two annual events are particularly central to the Section's activities. First, the Joint Institutions Breakfast Event fosters the collaboration between IEEE, the Institute of Engineering and Technology (IET) and Engineering New Zealand (ENZ). It also provides a key opportunity for interaction with industry at the board and CEO level. Last year, this event was held at the Wellesley

Boutique Hotel in Wellington, where Mr. Tony Ryall, Chair of Transpower, delivered an illuminating talk about the future of the electricity industry in New Zealand. The other iconic annual event of NZCS is the IEEE Postgraduate Presentation Day. This one-day event showcases postgraduate research in one of the many IEEE fields of interest being undertaken at Victoria University of Wellington and Massey University.

NZCS has also been actively involved in IEEE events in R10. Last year, the Section sent representatives to the IEEE Women in Engineering International Leadership Summit in Australia, as well as to the R10 Student/Young Professionals/WIE/Life Member (SYWL) Congress in Bali. NZCS also sponsored or co-sponsored several workshops and conferences such as the Workshop on Image Processing in VHDL on FPGAs, the New Zealand Wireless workshop, an Instrumentation and Measurement Society workshop, as well as the Image and Vision Computing New Zealand conference, which took place in Auckland in December.



*IEEE Postgraduate Day at Victoria University of Wellington.*

As a conclusion to a very successful year, the Section's Annual General Meeting was held in Wellington in December, this time with a new format: the traditional dinner was replaced by a buffet, intertwined with a series of short technical talks about Artificial Intelligence and Signal Processing, stimulating some very lively discussions in the audience.

Keep an eye out for NSCS's future activities by visiting <http://ewh.ieee.org/r10/nzc/>, or via Facebook!

## R10 Council of the Month – India Council

**Prepared by: Sri Niwas Singh, Chair for India Council**

Activities in India dates back to 19<sup>th</sup> November 1959 with the formation of the India Section of the IRE with about four members. A band of dedicated engineers started IEEE India Section at Bombay in 1963. Thus with a small beginning at Bombay, IEEE activities have spread over the length and breadth of India. On 13<sup>th</sup> July 1976, IEEE Bombay Section was formed with Mr. T.V. Balan as the founder Chairman.

In December 2018, the IEEE membership in India has crossed 52,000 members and accounts for 40.25% of the IEEE R10 membership. India Council (IC) was formed on 20<sup>th</sup> May 1976 and has grown to be the largest Council in member-strength among the 17 Councils of IEEE. With 11 Sections and 14 Subsections (including Nepal), India Council is next only to Florida with 12 Sections.

The past R10 directors from India council were FC Kohli (1973-74), V Prasad Kodali (19981-82), HL Bajaj (1997-98) and K. Ramakrishna (2015-16). Deepak Mathur will serve IEEE R10 as Director during 2021-2022. Five Bombay Section members Mr. F. C. Kohli, Mr. T. V. Balan, Mr. D. N. Purandare, Mr. Kirit and Mr. H. S. Sonawalla were selected in 1984 for the IEEE Centennial Medal Award for their loyal and dedicated service to the IEEE and in recognition of the exceptional service to the profession. In addition to this, IC members have received numerous IEEE MGA, TAB and EAB awards. Prof Sri Niwas Singh, who is R10 Vice-Chair, Technical Activities for 2019, is the current IC Chair (2019-20).

Major Activities of India Council include: (1) IC Flagship Technical Conference-INDICON. First INDICON was organized at IIT Kharagpur during 20<sup>th</sup> – 22<sup>nd</sup> December 2004 and the 16<sup>th</sup> INDICON will be organized at Marwadi University, Gujarat Section, (2) All India Students-YP-WIE-Congress held regularly since 2000, (3) M V Chauhan Student Paper Contest held regularly since 2010, and (4) IEEE Group medical insurance since 2016.

IEEE India Council has signed multiple MoUs and agreements with non-profit organizations to conduct professional activities for the benefit of its members.



*2019 IEEE India Council EXECOM Members during Public Policy Workshop, New Delhi and TENSYP 2019, Kolkata*

Various Sections of India council have won outstanding section awards: Bombay Section (1998, 2002, 2007); Kerala Section (2004, 2009, 2014); Bangalore section (2001, 2013); Kharagpur section (2008, 2012); Delhi section (1999); Madras section (2010), Hyderabad section (2011); Gujarat section (2004) and Pune section (2013).

***Region 10 Outstanding Volunteer Award – past recipients***

2015- LakshminarayanaMerugu, Hyderabad Section & NirbhayChaubey, Gujarat Section

2014- Ashok D Jagatia, Bombay Section

2013- Arup Dasgupta, Gujarat Section

2012- MGPL Narayana , Hyderabad Section

2011- Nimmagadda S Prasad, Hyderabad Section

2010- Satish Chaparala, Hyderabad Section; K.Ramakrishna, Bangalore Section & Anil K. Roy, Gujarat Section

2009- Arun Agarwal, Hyderabad Section

2008- Deepak Mathur, Gujarat Section & Rajagopalan Kannan, Hyderabad Section

2007- R.K.Asthana, Delhi Section

2006- Mayank M Pande, Gujarat Section

2005- Anthony Lobo, Bombay Section; Raj KurmarVir, Delhi Section & Satheesh Kumar, Kerala Section

2004- Mini S. Thomas, Delhi Section; D. M. Tagare, Bombay Section & S. Raghunathan, Hyderabad Section

2002- K Rajgopal, Bangalore Section; S C Bhargave, Hyderabad Section & N T Nair, Kerala Section

2001- H Kalyanasundaram, Bombay Section & KondapiViswanath, Hyderabad Section

1999- R. G. Gupta, Delhi Section

1998- Kalavendi J Sarma, Hyderabad Section & S. Gopakumar, Kerala Section

1996- N. Vyaghreswara Rao, Hyderabad Section

# R10 Subsection of the Month – Sarawak Subsection

<http://sarawak.ieeemy.org>

<https://www.facebook.com/IEEE.Sarawak>

Prepared by: Ong Chin Ann, Executive Committee for Sarawak Subsection ([ongca@ieee.org](mailto:ongca@ieee.org))

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## ABOUT SARAWAK SUB-SECTION



Prof. Dennis Wong,  
Founding Chair

The idea of establishing IEEE Sarawak Subsection was coined back in 2014 and continuous efforts have been made ever since. The official petition campaign, which started from August 2015, was initiated by IEEE Senior Member Professor Dennis Wong M.L., when he served as Dean of Faculty of Engineering, Computing and Science at Swinburne University of Technology Sarawak Campus. He is currently the Deputy Provost at Heriot-Watt University Malaysia. With supports and help from IEEE Malaysia Section and IEEE Region 10, the petition eventually went through on 11<sup>th</sup> December 2015 followed by the issue of a letter of formation, which stated the effective formation date of IEEE Sarawak Sub-section as 21<sup>st</sup> Nov 2015. As of 31<sup>st</sup> December 2018 (MGA), IEEE Sarawak Subsection consisted of 190 members, which includes 78 graduates and student members, 81 professional members, and 31 senior members. There are two student branches under the sub-section, [IEEE Curtin Malaysia Student Branch](#) and [IEEE Swinburne Sarawak Student Branch](#).

## ACTIVITIES

IEEE Sarawak Subsection initiated “Alternative Lighting Project for Remote Villages”, led by Dr. Then Yi Lung as part of the Subsection’s Humanitarian Technology activities in 2018. The team strives to deliver ongoing support to help more villages build toward sustainable prosperity with Phase II planned in July 2019. Since 2018, the Subsection has been actively organizing various Educational Activities such as STEM Workshops for secondary school students, Robotics Boot camps and Competitions, Data Science Challenge for primary school students, Gamification in Learning, and Teacher In-Service Program (TISP).



*Alternative Lighting Project (ALP) at Kampung Salak, Kuching.*



*40 Secondary School Students competed in IEEE Sarawak Inaugural Robotics Competition*



*Nearly 100 pupils from 14 primary schools across Kuching and Samarahan participated the “Data Science Challenge”*



*Over 100 participants attended the Gamification in Learning Seminar*

## SEMINAR & TALKS

The IEEE Sarawak Subsection has hosted prestigious and distinguished speakers from Switzerland, Taiwan, Australia, UK etc. for various seminars and technical talks in Sarawak since 2016. The seminar held recently by Prof. Dr. Amir Azam Khan from UNIMAS was titled “Critical issues related to integrity of High Voltage Overhead Electrical Conductors for long distance Power Transmission”.



The upcoming seminar on “[Milimeter Wave Propagation for Fifth Generation \(5G\)](#)” by Prof. Dr. Jafri Bin Din from Universiti Teknologi Malaysia will be held on 3<sup>rd</sup> July 2019 from 2.30pm – 5.30pm at Swinburne University of Technology, Sarawak Campus.

## AWARDS & FUNDING



*Ms. Cindy Bong from Brand and Sponsorship, Corporate Communication of Sarawak Energy Berhad (right) presented the cheque of RM50,000 to Assoc. Prof. Dr. Lau Bee Theng, Chair of IEEE Sarawak Subsection 2017-18.*

In 2018, IEEE Sarawak Subsection received a contribution from Sarawak Energy Berhad, as a Corporate Social Responsibility (CSR) partner to support community and school programs in Sarawak. Sarawak Energy Berhad generously donated MYR50,000 (per annum) to support IEEE Sarawak’s activities for the years 2018 and 2019. In 2018, one of the members of IEEE Sarawak won the IEEE Malaysia Outstanding Volunteer award, while another member won the IEEE R10 EA Award for the university category. IEEE Sarawak and IEEE Swinburne Sarawak Student Branch are now working on the Robotics Challenge Program scheduled on 12<sup>th</sup> and 13<sup>th</sup> August 2019. This student branch is the winner of the Pre-University Category in IEEE R10 EA Award with their proposal entitled “STEM Outreach Robotics Challenge”.

## CONFERENCES



IEEE Sarawak Sub-section is privileged to host the IEEE R10 HTC 2020 from 1<sup>st</sup> to 3<sup>rd</sup> December 2020 in Sarawak with the theme, “*Digital Ecosystem for Humanity*”.

Malaysia, and most of the neighboring countries in South East Asia are in the phase of developing their digital economy, education and health with a focus on research and empowering technologies in these areas. IEEE R10 Humanitarian Technology Conference (HTC) 2020 conference theme has high relevance to humanitarian technology and focus on emergent digital systems for humanitarian relief and recovery. This will attract IEEE members around the world to visit Malaysia & Sarawak in 2020.

In addition, IEEE Sarawak is also a co-organizer of 9<sup>th</sup> *IEEE International Nanoelectronic Conference (IEEE INEC 2019)* scheduled from 3<sup>rd</sup> to 5<sup>th</sup> July 2019, technical program committee of *UNIMAS STEM 12<sup>th</sup> Engineering Conference (EnCon)* scheduled on 28<sup>th</sup> and 29<sup>th</sup> August 2019, and 2<sup>nd</sup> *International Conference on Computer and Drone Applications (IConDA)* scheduled from 19<sup>th</sup> – 21<sup>st</sup> December 2019.

For more info and updates, please visit the Subsection’s [conference archives page](#).

# R10 Student Branch of the Month – Multimedia University SB

Written by: Mohammed Hussein, Past Chair for MMU Student Branch

For the past 3 years, MMU student branch has been exemplary and outstanding in its operations and overall performance. This has resulted in the SB winning 3 university awards, 3 national awards and 2 international (R10) awards. MMU SB is happy to share with other student branches the best practices that have helped to achieve these results.

Membership growth is crucial to every student branch. However, to promote this, it is important to showcase the benefits that the student branch can bring to the university and also organize large numbers of events to increase the visibility among the student community. The more the number of events conducted, the more benefits the students can see and the higher the number of students registering as IEEE Student Members.



*2017-2018 IEEE MMU SB committee members along with 2017-2018 Malaysia section Chair, Assoc. Prof.Dr. Mohammad Faizal Ahmed Fauzi and SB Counselor, Prof.Dr. Mohamad Yusoff Alias upon receiving IEEE MGA and R10 SAC Awards*

Furthermore, student branch officers must choose a suitable time and place to promote IEEE membership. The beginning of new semesters and what is known as “Club and Society Registration Days/Weeks” are the best times to conduct membership drives.

Accurate and regular documentation is another important best practice of a student branch. Documentation of events and finances is mandated by both IEEE as well as the university. Documenting events can help in applying for awards and funds apart from the fact these are needed to prepare the annual report.

Awards can also significantly add value to student branches. Awards are a successful demonstration of proven capabilities and hard work. Student Branches with awards and recognitions have shown higher membership growth and managed to receive more funds from IEEE as well the parent universities. There are many opportunities to win awards such as the IEEE MGA Awards, IEEE R10 SAC Awards, Section Awards etc. Additionally, awards motivate SBs to deliver better performance in future years.

Lastly, the leaders of the student branches need to be passionate and committed officers, who will support the growth of the SB and help to conduct more beneficial events for members. Student branches should implement new strategies to develop talent and seek future officers. For every event of the MMU SB, there is an announcement call to members requesting for volunteers to help conduct the event. During these events, the SB high committee would scout for volunteers who have the potential to be new officers or perhaps future leaders and invite them to join the student branch in the next Annual General Meeting (AGM).



# BEST PRACTICES AND R10 COMMITTEE REPORTS



## 7. BEST PRACTICES AND R10 COMMITTEE ARTICLES

### Humanitarian Technology Activities Best Practices

Indonesia Section - Winner of 2018 R10 HTA Section Award

Wisnu Jatmiko, Chair for IEEE Indonesia Section

#### BACKGROUND

Indonesia is a nation with an area that spans more than 1.9 million kilometers in South East Asia. This archipelago has more than seventeen thousand islands, which are both inhabited and uninhabited. There are approximately 270 million people living in Indonesia, with wide diversity in culture, language and cuisine. However, with the immense area and numerous islands, there is a disparity in several crucial sectors, such as economics, healthcare, and education.

IEEE Indonesia section is aware and concerned about the prevailing issues and disparities in Indonesia. The section attempts to make a contribution to solving these issues through several means. This is by leveraging the section's capabilities in education and healthcare. In addition, disaster recovery is also considered to be a pressing issue, as Indonesia is also located in the Circum-Pacific Belt, or better known as the Ring of Fire, where approximately 90% of the world's earthquakes occur.

During 2018, IEEE Indonesia section has been consistent in organizing numerous humanitarian-related activities. Most of these activities were conducted by Chapters and Groups of the section, particularly the Education Chapter and SIGHT Affinity Group of Indonesia Section. These activities were divided into three main areas namely Healthcare, Education, and Disaster Relief.

#### SAHABAT BUNDAKU MOBILE APPLICATION

Driven by the high infant mortality rate in Indonesia, the team from IEEE SIGHT on eHealth and Telemedicine Indonesia, chaired by Dr. Yoke Irawan developed a mobile application called Sahabat Bundaku (Mother's Best Friend). This application connects mothers, midwives and health offices for mother and child's primary healthcare.

This project was supported by the IEEE SIGHT Project grant and its scale up supported by the IEEE HAC Project grant. The team worked together with the Biomedical Engineering Department of Bandung Institute of Technology and Midwifery Department of Padjadjaran University (UNPAD) for the initial design of the application, while the implementation was done with the support of local health offices, including the Surabaya municipality and West Bandung Regency health office.



*SahabatBunda Introduction and Training  
- Bali 2018*



*SahabatBunda Introduction and Training  
- Surabaya, 14 August 2017*

IEEE SIGHT Indonesia conducted various activities including focus groups, training programs and social outreach in Surabaya, Bandung and Bali to introduce and maintain the Sahabat Bundaku program. In addition, IEEE SIGHT, with the support of HAC Grant, also equipped a number of community health centers with child growth and development equipment. Even after the funding stops at the end of the grant period, IEEE SIGHT proposes to work with the Indonesian eHealth and Telemedicine Society to continue implementation and expansion of the program.



*One of the equipped Early Child Education Centre (combined location with Posyandu/Integrated Care Post) in Bandung*



*SahabatBunda Evaluation - Surabaya, 31 July 2018*

### TEACHER IN SERVICE PROGRAM

The Teacher In-Service Program (TISP) is a workshop held by IEEE volunteers for knowledge sharing in Science, Technology, Engineering, and Mathematics (STEM) education to high school teachers in Indonesia. These workshops are organized by the Education Chapter of IEEE Indonesia Section in different regions of Indonesia. In February 2018, a TISP workshop was held in Pekanbaru, on the Island of Sumatera, Indonesia. This workshop was attended by 30 teachers from various schools in Pekanbaru city. The theme of the workshop is related to STEM Education and how IEEE can support STEM education. Another TISP workshop was conducted in October in Denpasar, Bali.



### DISASTER RELIEF EFFORTS



The city of Donggala, in Palu, Central Sulawesi, was struck by a devastating earthquake and Tsunami on 28<sup>th</sup> September 2018. IEEE Indonesia Section along with Universitas Indonesia donated 2 sets of power supplies for emergency response on 2<sup>nd</sup> October 2018, on the occasion of IEEE day. These power supplies are powered by solar cells, which generates electricity to be stored in a portable battery.

# IEEE Presence at Asia's Mega Technology Event

## IEEE Asia-Pacific Limited

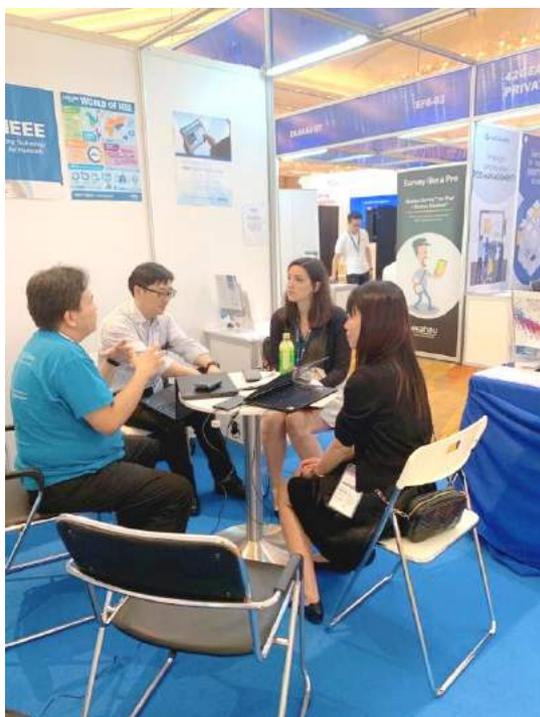
### Ewell Tan, Project Manager for IEEE Asia-Pacific Limited

Once again, IEEE is proud to be one of the supporting organizations for ConnectTech Asia. This is the 4<sup>th</sup> time IEEE partners with ConnectTech Asia (previously known as CommunicAsia). This year, ConnectTech Asia was held at Marina Bay Sands and Suntec Singapore from 18<sup>th</sup> – 20<sup>th</sup> June 2019. Comprising BroadcastAsia, CommunicAsia and NXTAsia, this regional event unveiling the Asia's digital future by highlighting emerging smart technologies (such as 5G, IoT, AI, Smart Cities and Blockchain) that are shaping the region's digital landscape. The show boasts key technology brands such as Alibaba Cloud, Amazon, Ericsson, Google, Huawei, IBM, Microsoft, NTT DOCOMO, Red Hat, Singtel, Verizon and VMware showing their latest technologies innovation. One of the main focus of this summit is 5G technologies that enable a smarter and more connected world, has attracted 40,000 C-levels, decision makers, end users, and professionals across the world.

The Guest of Honour, Mr. Tan Kiat How, Chief Executive of Infocomm Media Development Authority (IMDA), gave an opening speech at the summit. In his speech, Mr. Tan pointed out the digital technology is sparking innovation, boosting productivity, spurring economic growth and raising the standard of living for societies around the world. All sectors shall work together to harness the full benefits of digitalization.

Through the partnership, Chairman of Smart Cities Network (SCN), Tay Kok Chin was invited to be the moderator for Internet of Things and Smart Cities session. Chief Innovation & Trust Officer of Amaris.AI, Prof. Yu Chien Siang was also invited as a speaker to dive deeper into the topic of how artificial intelligence (AI) will disrupt today innovation practices. Companies have started to invest and build capabilities in AI as it will gradually become more cost efficient.

In addition to the mega summit, both IEEE Broadcast Technology Society and IEEE Asia-Pacific each has an exhibit booth at this show to promote, engage and network with the regional industry players and companies. IEEE represents a crucial partnership that provides additional networking opportunities for engineers, scientists, technologists, policy makers to stay abreast of the latest technology advancement.



*A sharing session on what are the products and services that IEEE can provide to add value to our customers*



*Staff from IEEE Asia-Pacific: (from left to right) Tom Seah, Richard Chandra, Alex Liu, Min Bia Gunawan, Ewell Tan, (not in the picture) Leo Hwa Chiang and Melody Koh.*

# IEEE Region 10 Industry Forum at ISCAS2019

## R10 Industry Relations Committee

### Toshihiko Sugie, R10 Industry Relations Committee

IEEE Region 10 Industry Relations Committee (IRC) organized the Region 10 Industry Forum on the sidelines of the IEEE International Symposium on Circuits and Systems (ISCAS) 2019 at the Sapporo Convention Center in Japan on 27<sup>th</sup> May 2019. The theme of the forum was **“Industrial application of AI-related technologies in cooperation with academia for SDGs”**. This forum focused on emerging and recent topics of interest as well as the contribution of industry-academia collaboration in the development of the start-up ecosystem at Sapporo. The forum was a huge success and attracted 70 participants.

After the opening remarks by R10 IRC Chair, Prof. Chris Gwo Giun Lee, four speakers delivered presentations on cutting-edge topics. Yoshifumi Seki (Co-founder, Gunosy Inc.) spoke on “Adapting recommendation systems”; Prof. Hiroshi Mizushima (National Institute of Public Health) on “Blockchain in Healthcare”; Takuya Irisawa (Ecomott Inc.) on “How to melt snow with AI/IoT” and Prof. Tsuyoshi Yamamoto (Hokkaido University) spoke on “Prototyping the future in Sapporo”. The session was moderated by Toshihiko Sugie, from R10 IRC.

After this session, an event for networking for industry and academia was held. Other highlights of the forum included exhibition booth for the benefit of the industry and launch of IEEE Membership Development drive. **In 2019, IEEE R10 IRC proposes to continue organizing the R10 Industry Forums at various international conferences and looks forward to having wide participation from IEEE members all across the region for these upcoming Forums.** IEEE R10 IRC also gratefully acknowledges the support of Yoshikazu Miyanaga, ISACS2019 General Chair and Takao Onoye, Technical Program Chair as well as various conference organizers.

[https://jp.ieee.org/files/IndustryForum\\_ISCAS2019.pdf](https://jp.ieee.org/files/IndustryForum_ISCAS2019.pdf)

<https://jp.ieee.org/files/Program.pdf>



## R10 Section Student Activities Chairs and Student Representative Group on IEEE Collabratec

### R10 Student Activities Committee

#### Saaveethya Sivakumar, R10 Student Representative

R10 Student Activities Committee has established a networking group on IEEE Collabratec for all Section Student Activities Chairs (SAC) and Section Student Representatives (SSR) in Region 10 to participate. This is an informative platform where R10 Student Activities Committee will constantly share news and important information to keep our Section SAC and SSR posted.

Send a request to join the group at: <http://bit.ly/R10SACPortal>

(Requests will be approved only after the verification with the IEEE officer roster)

If your Section has not yet had a Section SAC or SSR, please do nominate or appoint an officer and file their officer position at IEEE officer reporting: <https://officers.vtools.ieee.org/> as soon as possible.

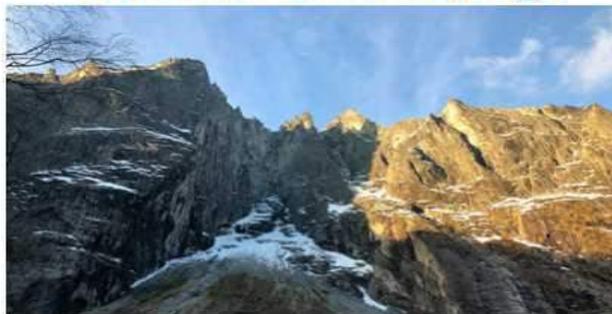


# IEEE R10 EA Challenge Results

## R10 Educational Activities Committee

Lance Fung, R10 Educational Activities Coordinator

### IEEE R10 EA Challenge



The 2019 R10 EA Challenge received many high quality submissions. After discussion and approval by the Regional Director, the winners are:

- **Winner (University):** Sarawak Subsection – “University Education, Computational Thinking through Game Co-Creation Approach”.
- **Winner (Pre-University):** Swinburne Sarawak Student Branch – “STEM Outreach Robotics Challenge for Secondary Schools”.
- **Runner Ups (University):** Education Society Chapter, Pune Section – “Technology Dissemination Contest for Students (TDCS-2019)”.
- **Runner Ups (Pre-University):** Education Society Chapter, Indonesia Section – “Localized IEEE STEM Education Syllabus for Indonesia Primary Schools”.
- **Commendation Supports:**
  1. Bangladesh Section – “Engineers Educate Future Engineers (EEFE)”;
  2. Bahawalpur Subsection – “IEEE EA Awareness in Orphan House” and “IEEE Education and YP joint Activity Day”;
  3. UTHM Student Branch – “Terokai Dunia Sains dan Teknologi” and “Young Engineer State Challenge 2019 (YESC 2019)”.

The R10 EA Committee thanks all proposers and we look forward to hearing the fruitful results from the proposed projects.

# R10 Student Branch Website Contest 2019 Winners

## R10 Student Activities Committee

**Saaveethya Sivakumar, R10 Student Representative**

We are pleased to announce that IEEE Region 10 Student Activities Committee has concluded the results for IEEE Region 10 Student Branch Website Contest 2019.

### First place

Pakistan Institute of Engineering & Applied Sciences

<https://ieeepieas.com/>

Islamabad Section

### Second place

American International University - Bangladesh

<https://ieeelaiubsb.com/>

Bangladesh Section

### Third place

Curtin University - Sarawak

<https://ewh.ieee.org/sb/malaysia/curtinsarawak/>

Malaysia Section

The winning websites will be competing in inter regional global website contest organized by IEEE MGA Student Activities Committee. For more details of the global website contest visit:

<https://students.ieee.org/ieee-student-branch-website-contest/>





# AWARDS AND FUNDING



## 8. AWARDS AND FUNDING

### IEEE HAC PROJECTS CALL FOR PROPOSALS



#### Humanitarian Activities Committee

### IEEE HAC Projects – 2019 Call for Proposals

The IEEE Humanitarian Activities Committee (HAC) is tasked with supporting the IEEE Board-endorsed vision of IEEE volunteers around the world carrying out and/or supporting impactful Humanitarian Activities at the local level – i.e. “feet on the ground.”

IEEE HAC is currently inviting proposals for *Sustainable Development and Humanitarian Technology-related projects* aligned with this vision. The committee will review proposals **with budgets between US\$20,000 and US\$60,000**.

Proposals that address one or more **UN Sustainable Development Goals (SDGs)** in a major, impactful way will be prioritized for funding - [Link to UN Sustainable Development Goals](#). Proposals should take a holistic, community-based approach taking account of relevant environmental, cultural, socio-economic & infrastructural issues and policy priorities.

Proposals must demonstrate consultation with and a clear understanding of the needs of target communities and demonstrate a needs-driven approach to strengthening local capacity through technology deployment.

*Proposals requesting a larger budget contribution (US\$40,000 – US\$60,000) will be considered on a case by case basis, based on progress achieved with previous related activities.*

Including a section on the projected [Social Return on Investment \(SROI\)](#) analysis provides deeper insights into the project planning and the proposed execution and hence could increase the chances of the proposal being successful, particularly for larger projects. Please contact [hac-office@ieee.org](mailto:hac-office@ieee.org) for more information on how to perform SROI, in case needed.

**Term of funding: Up to 12 months following the award date.**

**Any proposal which requests (i) funding of less than \$20,000, (ii) is incomplete, (iii) does not have active local community involvement and active “Local” IEEE Volunteer involvement or (iv) for which a completed IEEE HAC Projects Budget Application Form is not submitted will *not* be reviewed. All proposals must disclose if an identical or similar proposal is currently under evaluation for funding elsewhere.**

**NEW: All projects that involve children must follow [IEEE Guidelines for Working with Children](#). Any HAC Project funding will be contingent on policy compliance.**

#### **Deadlines:**

- ~~Call 1: 21 January 2019~~
- ~~Call 2: April 1, 2019~~
- Call 3: July 15, 2019
- Call 4: September 9, 2019 **ONLY IF FUNDS REMAIN**

For more information, visit <https://www.ieee.org/about/corporate/humanitarian-activities-committee.html>

# IEEE HAC EVENTS CALL FOR PROPOSALS



## Humanitarian Activities Committee

### IEEE HAC Events – 2019 Call for Proposals

IEEE Humanitarian Activities Committee (HAC) supports strengthening the capacity and impact of IEEE volunteers, staff and OUs involved in sustainable development and humanitarian technology related activities around the world. IEEE HAC facilitates necessary education and training, builds strategic partnerships, provides funding for projects and events and supports IEEE SIGHT activities.

IEEE HAC is currently soliciting proposals to support *Sustainable Development and Humanitarian Technology-oriented events (including conferences, conference tracks and smaller scale workshops)* aligned with this vision. IEEE HAC seeks to support relevant events around the world.

Events that address one or more **UN Sustainable Development Goals (SDGs)** in an impactful way will be prioritized for funding - <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>.

**Please note:** IEEE HAC will only support conferences/events/activities that can clearly articulate a firm alignment with the mission of IEEE HAC.

#### Deadlines:

- Submission deadline for **Call 1** is **24 January 2019**
- Submission deadline for **Call 2** is **25 March 2019**
- Submission deadline for **Call 3** is **20 May 2019**
- Submission deadline for **Call 4** is **19 August 2019**

**Download** the application form at: <http://bit.ly/2ESHaEW>

Please submit your completed form to [hac-events@ieee.org](mailto:hac-events@ieee.org)

**For more information, visit** <https://www.ieee.org/about/corporate/humanitarian-activities-committee.html>

# IEEE SIGHT PROJECTS CALL FOR PROPOSALS

## IEEE SIGHT

Special Interest Group on  
Humanitarian Technology

### IEEE SIGHT Projects – 2019 Call for Proposals

The IEEE Humanitarian Activities Committee (HAC) is tasked with supporting the IEEE Board-endorsed vision of IEEE volunteers around the world carrying out and/or supporting impactful Humanitarian Activities at the local level – i.e. “feet on the ground.” IEEE HAC funds the activities of the SIGHT (Special Interest Group on Humanitarian Technology) Program, which is a network of IEEE volunteers around the world that partner with underserved communities and local organizations to address local societal challenges through the exploitation of technology in the sustainable development and humanitarian technology space.

The SIGHT Steering Committee is currently inviting proposals for *Sustainable Development and Humanitarian Activities related projects* aligned with this vision. The committee will review **proposals with budgets between \$1,000 and US\$19,999.**

Proposals that address one or more **UN Sustainable Development Goals (SDGs)** in a coherent way will be prioritized for funding - <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>. Proposals should take a holistic, community-based approach taking account of relevant environmental, cultural, socio-economic & infrastructural issues and policy priorities.

Proposals must demonstrate consultation with and a clear understanding of the needs of target communities, and demonstrate a needs’ driven approach to strengthening local capacity through technology deployment.

*Proposals requesting a larger budget contribution (US\$10,000 – US\$19,999) will be considered on a case by case basis, based on progress achieved with previous related activities.*

**Term of funding: Up to 12 months following the award date.**

**Any proposal which requests (i) funding of less than \$1,000 OR more than \$19,999, (ii) is incomplete, (iii) does not have active local community involvement and “Local” IEEE Volunteer involvement or (iv) for which a completed IEEE SIGHT Projects Budget Application Form is not submitted will not be reviewed. All proposals must disclose if an identical or similar proposal is currently under evaluation for funding elsewhere.**

**NEW: All projects that involve children must follow [IEEE Guidelines for Working with Children](#). Any IEEE SIGHT Project funding will be contingent on policy compliance.**

Teams/authors applying for a SIGHT project financial support must certify and disclose their significant financial interest (and those of their immediate family) prior to proposal submission.

#### Deadlines:

- ~~Submission deadline for Call 1 is 28 January 2019~~
- ~~Submission deadline for Call 2 is 22 April 2019~~
- **Submission deadline for Call 3 is 15 August 2019**

For more information, visit <https://www.ieee.org/about/corporate/humanitarian-activities-committee.html>

# IEEE HAC CONFERENCE PARTICIPATION PROGRAM



## Humanitarian Activities Committee

### IEEE HAC Conference Participation Program 2019 Call for Applicants

IEEE Humanitarian Activities Committee (HAC) supports strengthening the capacity and impact of IEEE volunteers, staff and OUs involved in sustainable development and humanitarian technology-related activities around the world. IEEE HAC facilitates necessary education and training, builds strategic partnerships, provides funding for projects and events and supports IEEE SIGHT activities.

The IEEE HAC Conference Participation Program will provide a limited number of partial scholarships to support participation at 2019 conferences with a sustainable development and humanitarian technology focus or component. The objective is to facilitate more extensive networking, sharing of experiences and partnership building, and reduce potential economic barriers to participation by IEEE volunteers active in the sustainable development space.

#### 2019 Submission Deadlines:

- ~~31 January~~
- ~~27 February~~
- ~~27 March~~
- ~~24 April~~
- ~~29 May~~
- 26 June
- 31 July
- 28 August
- 25 September
- 30 October

Please submit via IEEE HAC **NEW** funding opportunities portal ([LINK](#))

If you have questions or would like to clarify any issues before submitting your application, please contact [hac-cpp@ieee.org](mailto:hac-cpp@ieee.org) for more information.

For more information, visit <https://www.ieee.org/about/corporate/humanitarian-activities-committee.html>

# R10 Joint Student Branch Initiative Fund Call for proposals

The Initiative will introduce a fund/grant to the sections that can be used for events involving at least 2 student branches, one that is currently inactive or struggling and another that is highly active. The proposed projects/events for the fund will give the inactive SB members a chance to understand the processes of successfully conducting events and how to maintain and keep a student branch active in the long run by emulating a highly successful SB.

Each selected project will be funded a maximum of USD 400 with a matching fund from the section. For full details and submissions please follow:

<https://sac.ieeer10.org/joint-sb-initiative/>

Submissions Deadline: 4<sup>th</sup> August 2019, 23.59 IST.

For enquiries contact us at: [r10sac@ieee.org](mailto:r10sac@ieee.org)



**IEEE Region 10**  
Student Activities Committee

## JOINT SB INITIATIVE

*The Initiative will introduce a **fund** to the sections that can be used for events involving at least 2 Student Branches, one that is currently **inactive** or struggling and another that is **highly active**.*

### PROJECT TIMELINE

Call for proposal **17<sup>th</sup> June 2019**

Submission deadline **4<sup>th</sup> August 2019**

Evaluation and announcement of grant winners **15<sup>th</sup> August 2019**

Duration given for the sections to organize the project **15<sup>th</sup> August to 15<sup>th</sup> October 2019**

Activity Report **1<sup>st</sup> November to 15<sup>th</sup> November 2019**

Fund Transfer **15<sup>th</sup> November to 25<sup>th</sup> November 2019**

Each selected project will be funded a maximum of **USD 400** with a matching fund from the section



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sac.ieeer10.org



# CONFERENCE CALL FOR PAPERS



# CONFERENCE CALL FOR PAPERS



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IEEE Region 10

IEEE Kerala Section





**7<sup>th</sup> IEEE Region 10 (Asia Pacific)  
Humanitarian Technology Conference**  
<http://r10htc2019.org>

**CALL  
FOR  
PAPERS**

**12-14 Nov.2019, Universitas Indonesia, Depok, Indonesia**

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**Contact Information**  
r10htc2019@gmail.com

IEEE R10 HTC 2019, which is organized and hosted by IEEE Indonesia Section, will be held in Depok at November 12-14, 2019. The theme of the conference, “**Advancing Sustainable Green Technologies for Humanities,**” is to draw special attention to the societal expectation on humanitarian technologies’ ability to provide practical and lasting solutions.

**Topics of interest include, but not limited to**

- Robotics, control systems and automation
- Cloud computing, big data, architecture, mobile and wireless communications,
- Optical and photonic communications, optical networks
- Biomedical engineering
- Circuits, systems and signal processing,
- Power electronics, machines and drives, high voltage
- Telecommunication technologies
- Semiconductor, photonics and nanotechnology
- Energy and environment
- IoT and enabling technologies
- Information and communication technologies

**with the focus on**

- Health care
- Social welfare
- Poverty alleviation
- Education
- Disaster management
- Food and agriculture
- Women empowerment
- Sustainability and environment
- Other humanitarian aspects

**Tracks:**

- Conference Track
- Project Competition Track
- Tutorial and Short Courses
- Region 10 Congress Track

**Accepted and presented papers  
will be submitted to IEEE Xplore**

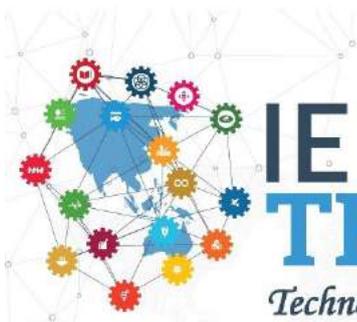
**Important Dates:**

- 14 Mar : Tutorial/special session proposal deadline  
31 Mar : Notification for tutorial/special session  
2 Apr - 5 Jul : Paper submission  
15 Mar -15 Jun : HT Project competition submission  
1 Aug : HT Project finalist notification  
30 Aug : Paper acceptance notification  
30 Aug - 1 Oct : Registration  
1 Jul – 1 Oct : Workshop registration  
1 Oct : Deadline for camera ready paper

**Registration Fee:**

Registration type	International (USD)	Local (IDR)
REGULAR MEMBER	300	3,000,000
REGULAR NON-MEMBER	350	4,000,000
STUDENT MEMBER	200	2,000,000
STUDENT NON-MEMBER	250	2,500,000
AUDIENCE	150	1,500,000

Additional	International (USD)	Local (IDR)
ADDITIONAL PAPER	150	1,950,000



# IEEE TENSYP 2020

*Technology for Impactful Sustainable Development*



Organized By



Dhaka, Bangladesh

5<sup>th</sup> to 7<sup>th</sup> June 2020

[www.tensymp2020.com](http://www.tensymp2020.com)

[Info@tensymp2020.com](mailto:Info@tensymp2020.com)

## CALL FOR PAPER

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Abir Ahsan Akib, BRAC University

IEEE Region 10 Symposium (TENSYP) 2020 will be held on Hotel Pan Pacific Sonargaon Dhaka, Dhaka, Bangladesh from 05 June to 07 June 2020. This is a prestigious flagship technical conference of IEEE Region 10.

The theme of TENSYP 2020 is "Technology for Impactful Sustainable Development" and its aim is to bring together individuals conducting project and research to achieve the United Nation's 17 global Sustainable Development Goals (SDGs) to end poverty, protect the planet and ensure that all people enjoy peace and prosperity.

Prospective authors are invited to submit full paper using online paper submission system. There will be best paper awards and a large number of travel grants. All accepted and presented papers will be submitted to IEEE Xplore.® digital library.

The scope of the conference includes but not limited to the following areas:

- ◆ Antenna, Microwave & RF Engineering
- ◆ AI, Computer Networks, Security & IOT
- ◆ Biomedical Eng. & Bioinformatics
- ◆ Cloud, Big Data & ICT
- ◆ Computer Architecture & Systems
- ◆ Computer Vision, Graphics & HCI
- ◆ Clean Water and Sanitation
- ◆ Climate Change and Environment
- ◆ Devices, Materials & Processing
- ◆ Electrical Machines & Drives
- ◆ Ethics and Societal Impacts of Technology
- ◆ Emerging Technologies
- ◆ Humanitarian Technology
- ◆ Nano & Semiconductor Technology
- ◆ Photonic Technologies & Applications
- ◆ Power Electronics
- ◆ Power System & Renewable Energy
- ◆ Robotics, Control & Automation
- ◆ Software & Database Systems
- ◆ Signal, Image & Video Processing
- ◆ Sustainable Consumption and Production
- ◆ Technology for Quality Education
- ◆ VLSI, Circuits & Systems
- ◆ Wireless & Optical Communication
- ◆ Sensor Technologies and Applications
- ◆ Information Technologies
- ◆ Communications and Networks
- ◆ Computational Intelligence
- ◆ Industrial Applications
- ◆ Women Empowerment

## Registration Fees

Category	Local (BDT)	Foreign (US\$)
Non IEEE Member	15,000	375
IEEE Member	12,000	300
Non IEEE Student Member	10,000	250
IEEE Student Member	8,000	200
IEEE Life Member	8,000	200

One registration covers one paper. For each additional paper, 50 US\$ (For local authors 2,000 BDT) will be added to the registration fees listed.

Registration Fees include half day city tour, two lunches, snacks, one banquet dinner, social events, entry to all technical sessions, project presentation and quizzes.

## Important Dates

- ◆ Special Session (SS) Proposals: November 15, 2019
- ◆ Submission of Regular/SS Papers\*: January 15, 2020
- ◆ Notification of Acceptance: March 15, 2020
- ◆ Camera Ready Submission: March 30, 2020
- ◆ Author Registration: March 30, 2020

## Events

- ◆ YP, WIE and Students Events
- ◆ Tutorials
- ◆ Industry Panels
- ◆ IEEE HAC Event

## Partial Travel Grants

A large number of travel grants (50 to 300 USD) are available. Apply during paper submission and get the result during notification of acceptance.

Contact: Prof. Dr. Celia Shahnaz, General Chair, TENSYP 2020, [dr.celia.shahnaz@ieee.org](mailto:dr.celia.shahnaz@ieee.org)



DIGITAL ECOSYSTEM FOR HUMANITY

# IEEE R10 Humanitarian Technology Conference 2020

1-3 December 2020 | Kuching, Malaysia

Organized by



For more info, please visit <http://sarawak.ieeemy.org> or contact

General Chair - Associate Professor Dr. Lau Bee Theng

([blau@swinburne.edu.my](mailto:blau@swinburne.edu.my)),

General Co-Chair - Associate Professor Dr. Mohammad Faizal Ahmad Fauzi

([faizal1@mmu.edu.my](mailto:faizal1@mmu.edu.my))

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interested.

# IEEE R10 TODAY



JUNE/JULY ISSUE 2019