

## Uganda Section

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**List the activities carried out to foster relations with Industry and the results obtained. List the initiatives planned during the next 6 months and their expected outcomes. How can the Region help your Section in your industry-related activities?**

The year 2019 was a busy one with exciting industry engagement activities and events for IEEE Uganda Section as listed below:

- We held Capacity Building Workshop on Emerging Technologies on 15th January 2019 at Nakawa Vocation Training Institute supported by IEEE Region 8 Committee where participants were introduced to Machine Learning, Deep Learning, Artificial Intelligence and Cloud Computing by leading experts in the field.
- Academia Meets Industry AMI2019 10-11 April: the event was focused on bridging the gap between academia and industry by enhancing industry engagement in education, identifying key issues, promoting best practice, sharing success stories and celebrating participation. Participants were encouraged to think differently in order to fit into the evolving Industry needs.
- IEEE Power and Energy Society and Smart Village Awareness Drive event was held on 25th June at Resilient Africa Network where a volunteer from Kenya Section introduced participants to IEEE Smart Village and Solar Kiosks.
- Distinguished lecture on lightning: How does it work? By Dr. Ian S McKechnie from South Africa was held on July 23, 2019 at Resilience Africa Network.
- On 15th August 2019, we engaged the industry on developing an approach to assessing the impact of an IEEE SIGHT project titled "Reducing Newborns' Mortality Rates in Uganda through the use of Vital Signs Monitor" developed in collaboration with Neopenda organization. We engaged participants in developing and operationalizing the project.
- Distinguished Lecture: Easy and Lazy Technical Writing and Presentation: A step-by-step guide to establish a good logical structure by Akihiko K. Sugiyama. Dr. Sugiyama from Yahoo Japan who took participants through efficient paper writing, structure of a paper and slide preparation.
- On 25th September 2019 we held IEEE Uganda Section Educational Initiatives Stakeholders Meeting: This was at the request of IEEE President Jose Moura, where a new initiative to develop continuing education resources for practicing engineers and technical professionals in Africa was launched. IEEE Uganda Section was tasked to organize technical professionals to review and provide input to the proposed initiative.
- From 30th September to 04th October, IEEE Uganda Section held a 5-day workshop, organized in collaboration with International Center for Theoretical Physics (ICTP) and East African Institute for Fundamental Research (EAFIR) at Resilient Africa Network (RAN) where participants were introduced to the basics of entrepreneurship - seeking opportunities for innovative technical solutions to the needs of the society and taking these ideas to the market by developing a viable business model, a sound business plan and a commercialization strategy.
- IEEE Uganda Section participated in the 5th National Conference on Communications (NCC) that was held in Kampala from 17th- 18th October 2019. The NCC event provided an opportunity to build capacity and strengthen the academia and industry communities in communications particularly in the research of locally relevant solutions. The NCC provided students, researchers, developers, and practitioners with a platform to address new research challenges, share solutions and discuss issues relevant to the communications sector of Uganda through keynote and invited speakers that shared their views on communications from regulation, social-economic, political and gender perspectives.
- From 3rd - 4th December 2019, IEEE Uganda Section together with Uganda Institution of Professional Engineers (UIPE) held a joint workshop for Women in Engineering (WIE) to build their technical capacity and provided career advice to the participants at an event held at Uganda Industrial Research Institute (UIRI).

### IEEE UGANDA SECTION PLANNED INITIATIVES

- Our Section was pleased to begin the year with an exciting three days National Teachers Education Symposium held on 26th - 28th February 2020 organized in collaboration with Ministry of Education and Sports Uganda. The symposium was hosted with the main purpose of addressing some of the pertinent recommendations on the quality of a Teacher as well as increasing the awareness for the National Teacher Policy 2019. The workshop recognized that Uganda and the World at large requires competent, creative, and innovative teachers who can maximize the innate abilities for the 21st Century generation. Hence the theme for this year's event was: "Quality Teachers for the 21st Century."
- In this year (2020) we have began a process of forming Collaborations with Ministry of ICT and National Guidance, Uganda Communications Commission (UCC) and Ministry of Education and Sports (MoES) through the department of Teacher Instructor Education and Training (TIET) in order to further national activities and IEEE Uganda Section.
- We plan to host a Distinguished Lecture on Micro Robotics, Machine Learning and Artificial Intelligence where a guest speaker from Czech Republic will take participants through the listed topics.
- We are co-organizing the IST Africa 2020 Workshop in collaboration with Government of Uganda through the Ministry of Science, Technology and Innovation, Supported by the European Commission and African Union Commission, IEEE Society on Social Implications of Technology and IEEE Africa Council. IST-Africa 2020 will provide a world-class international forum to showcase existing Research, Innovation and ICT4D activities and capacity in Uganda, the rest of Africa and Europe. The Conference Programme combines strategic keynote presentations, a High-Level Roundtable, technical and policy papers, case studies and workshops. It also provides an opportunity to identify potential partners for future research cooperation under Horizon 2020.
- IEEE Uganda Section has also been selected to host Women in Engineering International Leadership Summit 2020 an event that provides regional opportunities to foster networking, mentorship, and collaboration for the women through Empowerment, Entrepreneurship, Leadership, and Emerging/Future Technology.

- We have held and plan to hold various meetings with industries and academic institutions in this year 2020 aimed at fostering the section activities, however we are at times limited by funds for running these exciting activities hence we would seek for special support from IEEE to enable us run activities smoothly. We have impacted thousands of people through our activities and events and hope to keep the work continuous.

**List the activities addressed to Students and/or Young Professionals and the results obtained. List the initiatives planned during the next 6 months and their expected outcomes. How can the Region help in your students and YP-related activities?**

We most times engage our Student Branches as volunteers and participants in our industry engagement events and activities, however we also held a number of activities specifically for students and young professionals as listed bellow

- Comsoc Communication System Training from 14th - 25th January 2019. We held a training about communication systems, point to point and point to multipoint links and Wi-Fi connections for ten days. This was sponsored by IEEE Communication Society and Voitech and number of student members participated in the training.
- We sponsored the IEE Students Professional Awareness and Career (SPAC) Conference 2019 hosted by IEEE Kyambogo University Student Branch, an annual event that attracts over 300 participants is aimed to bridge the gap between students and their career goals. SPAC offers students and employers a unique opportunity to network with one another in a professional environment along with professionals and academics representing the fields of Engineering and Computer Science.
- Together with Student Branches in Uganda, we hosted over 400 participants to celebrate IEEE day at Cavendish University on 8th Oct 2019. Some of our students were also invited to celebrate IEEEday with IEEE Mbarara University Student Branch on 1st Oct 2019.
- We engaged Student Branches in IEEE Mobile Application Development Contest (MADC), Extreme Programming Competition, Teacher in Service Program (TISP) Week 2019, Special Interest Group on Humanitarian Technology (SIGHT) project involving Installation of Off-Grid Solar Energy for a Local Public Health Center in Eastern Uganda and Entrepreneurship and Pitching Competition event.
- We also engaged students in Membership drives and awareness programs, IEEE SIGHT competition for Safe Water and Sanitation and took them to attend the IEEE Africa Students and Young Professional Congress ASYP 2019 held in Nairobi Kenya.
- This year we shall engage them in similar activities related to the above and have introduced new ideas such as Hardware Programming Contests and Industrial Tours to local companies. We would definitely need financial support from IEEE Region 8 inline with the above activities.

**List the activities carried out to retain and recruit members and the results obtained. List the initiatives planned during the next 6 months and their expected outcomes. How can the Region help in your membership-related activities?**

Most of our activities listed above for industries and student branches were heavily tied with an element of membership drives and recruitment strategies.

**List the activities intended to support chapters, affinity groups, student branches, technical activities; humanitarian activities; elections and officers' renewal and the results obtained. List the related initiatives planned during the next 6 months and their expected outcomes. How can the Region help in your support to chapters, affinity groups, and student branches?**

We hope to replicate most of the activities we listed in the industry engagements and student sections above and make few changes.

**Challenges (with a focus on what support is required from Region 8)**

We would wish to carryout more than the above activities, however we are sometimes limited by funding resources.

