

Uganda Section

Vincent Olema

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?

I am sharing this report on behalf of IEEE Uganda Section. This report covers our Section Activities from January to October, 2019 and it also initiatives for the next months.

Closer to Industry Activities that were carried-out to foster relations with Industry include the following:

Second Consultative Engineering Workshop: Perfecting the Neopenda 4-in-1 Vital Signs Monitor to Save Lives at Birth in Ugandan Communities

Date: 18th January, 2019 Time: 08:00 a.m. - 05:00 p.m. Venue: Resilient Africa Network (RAN), Plot 30, and Upper Terrace Kololo - Kampala, Uganda.

IEEE Uganda Section in - Conjunction with IEEE SIGHT Uganda Section Group and Neopenda (USA based medical Reasech organization) organized this second consultative Engineering workshop on perfecting the Neopenda 4-in-1 Vital Signs Monitor.

There were over 50 participants who were invited to participate at the event. The participants comprised of Biomedical, Electrical, Mechanical, Telecommunication, Computer Engineers, Medical Doctors, technicians and public health professionals to discuss and brainstorm improvements for the Neopenda vital signs monitoring device and system. Some of the invited workshop attendees were identified from the 1st Consultative Engineering Workshop, IEEE Uganda Section SIGHT members, and partnering hospitals etc.

The event was successful, at this moment we are now working on the recommendations that came out of the Engineering Workshop especially the break-away sessions to perfect the medical device.

The project is funded by SIGHT and HAC and it is on-going project where we were able interact with Industries in many activities. This project also increased our IEEE membership with about 50 participants.

To know about the 4-In-1 medical Wearerable Dveice: <https://www.enstartup.com/2018/07/31/neopenda-using-wearable-vital-signs-monitor-reduce-newborn-deaths-uganda/>

Academia Meets with Industry 2019: Date: 10th - 11Apr, 09:00 - 11th/10/2019. Time: 08:00 a.m. - 05:00 p.m. Venue: Royal Suites, Bugolobi, Plot 1th8-20 Binayomba Road, Luthuli Ave, Kampala, Uganda

This event was organized by Silver Bullet in collaboration with IEEE Uganda Section. Over 580 participants took part in AMI2019 representing industry practitioners, educators, Government agencies, regulators, professional associations, innovation support centres, students and other stakeholders. The audience had representation from a broad spectrum of stakeholders including educators, industry practitioners, regulators, professional associations, development partners and innovation support centers. Participants were drawn from all over the country, and and there was a strong showing for women, making up 40% of participants.

Background Recognizing that Science, Technology, Engineering and Innovation are key driver for development, we need to expand and deepen our capability to leverage technology and develop solutions for our fast-growing society and communities. To create the highly skilled and qualified workforce needed, it is essential to have continual interactions between industry and academia that will ensure continuous exchange of relevant knowledge to address challenges in an ever-changing environment. Purpose To create networks that will support creation of an engineering workforce is suitably prepared for the current and the future, needs of industry and the country as defined in Vision 2040. Objective Leverage the broad network of STEI practitioners to stimulate multidisciplinary and cross-sectoral discussion between academia and industry stakeholders to: i. identify current and future STEI needs of the country ii. identify challenges affecting the human resource shift to industry iii. Stimulate communication between the stakeholders aimed at solving the highlighted challenges.

Target audience The event was intended for full participation from: 1. Academia (students, educators and researchers) 2. Industry (innovators, practitioners and associations) 3. Government of Uganda (policy makers and regulators).

Synopsis Feedback received from various industry actors indicates that the academic programs are not well aligned with their specific needs. Owing to the dynamic nature of the industry environment, actors need to be agile and hence often operate using relatively short range goals; academia on the other hand make use of long range operations and in many cases, also lack the resources to enable the agility required to meet the ever-changing skills demanded by industry. The gap between academic programs and industry needs is contributing to low levels of workplace preparedness amongst new entrants to the work force. Proposed actions Despite their different goals and mind-sets, should be twined. Industry should be involved in education to boost the technical skills development. Bridging programs need to be promoted to assist in transitioning new entrants between academia and industry. Programs like UMA's "Ready to Work" have demonstrated that this can be sustainable and efficient approach to developing STEI personnel and can serve as models for replication.

The event link: https://docs.wixstatic.com/ugd/5995f4_5024a738d2a042f290473a8aa61beb9f.pdf This event was sponsored by IEEE, Eighty Seven, NITA Uganda, Action Aid, Uganda Manufacturing Association and Silver Bullet.

The activities that we have planned for the next Six Months are as follows:

We would like to organize 3 Workshops:

- IEEE - Industry familiarization meeting, 18th November, 2019 at Hotel Africa; where IEEE Uganda Section Industry ambassadors interface with Industry and see how they write MOUs to collaborate.
- Entrepreneurship workshop , where we invite successful business owners to come talk with both IEEE members and Students to start business.
- IEEE - Industry Collocation awareness, which will be carried-out by IEEE Uganda Section Industry ambassadors.
- IEEE Uganda Section Engineering Day 03 - 04 March, 2020at St. Lawrence University; where Students exhibit their research / Final year projects to industries for easy scaling purposes.

How IEEE Uganda Section can be helped by Region 8

Would like Region 8 help us to carry-out these activities? IEEE Uganda Section main challenges is funds to carry-out is activities. The first help is funding with at least \$ 10,000 USD. Samples of writing MOU

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?

Following were the activities that were organized so far addressed Student and You Professionals:

- Holding regular meetings
- Organized training on: How to write SIGHT Proposals; Dated 2th/02/2019 at Kyambogo University so as to engage them to write projects that alleviate the community problems.
- Team Building workshop at Mbarara University on 28th/03/2019 help to work in teams to achieve results.
- Organized Distinguished lectures etc.
- Career talks so that they can make good decisions to make good career path
- We have organized for students and pre-university (high school) students STEM oriented presentations.

6 Months planned include the following:

- Organize more distinguished lectures
- Organize team building workshops
- Entrepreneurship sessions
- Regular meetings etc
- Organize SYP local Conference

Region 8 should help in the following:

- Funds to support SYP activities
- regular mails with opportunities

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?

- Section Chair - reminding members to renew their memberships
- Conduct direct outreach activities to potential referral sources.
- Constant organization of Activities to keep our members and enjoy the IEEE benefits
- Continuous appreciation of IEEE Volunteers that way members remain active
- Regular mails to thank members on for attending IEEE Section Activities
- The MD officer sends out renewing e-mails for the IEEE HS members.
- Organize regular meeting
- Non-renewing members are asked to give feedback why not renewed their membership.

Planned 6 months planned activities include:

- End of year Social evening networking events
- Organized Trainings for MD Officers how recruit and retain IEEE members
- Organize regular meeting.

Region 8 should can help in the following ways:

- Motivate members who renew their membership on time
- Send funding to help Section with funding to conduct trainings
- Reward regular MD Officers with IEEE materials; which they can rewards IEEE members locally.

List the activities intended to support chapters, affinity groups, and student branches 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?

Activities intended to support chapters, affinity groups, and student branches and the results obtained.

- We organized distinguished lectures and invited members from the chapters, affinity and student branches to attend.
- Funded some of the activities of chapters, affinity and student branches
- We identified local distinguished Lecturers for chapters, affinity and student branches.

List the related initiatives planned during the next 6 months and their expected outcomes.

- Have regular meetings with leaders of chapters, affinity and student branches.
- Promote Collaboration so to identify local funding opportunities to support activities.
- Identify Distinguished Lectures for chapters, affinity and student branches.

Region 8 can help in the following ways:

- Identify and support the Distinguished Lectures
- Send funds to support the activities of these chapters, affinity and student branches.

Please, note all our activities are filed in Vtools for further i refer there.



