GCN GLOBAL COMMUNICATIONS NEWSLETTER

ComSoc Distinguished Lecturer Tour of Fawzi Behmann in Mexico, September 2018

By Carlos Eugenio Martínez-Cruz, IEEE ComSoc El Salvador Chapter Chair, and Esmeralda Asurza, IEEE ComSoc Peru Chapter Vice-Chair

Regarding IEEE members, Mexico is the second biggest in Latin America, just below Brazil. With ten sections, over 3,000 members, and 13 Communications Society chapters, the Mexican sections are known to be excellent hosts of DLT ComSoc volunteers. Three Mexican chapters agreed to host Fawzi Behmann, a well-known and self-defined "visionary, thought leader, author, entrepreneur and contributor in advancing adoption of technology in serving humanity." In his short biography, it is stated that "he spent over 30 years in industry and held various executive and leadership positions with Tier 1 companies in the areas of communications and networks spanning service provider with Teleglobe Canada, communications networking equipment with Nortel Networks and semiconductor with Motorola/Freescale in Canada and the US." All these credentials made him a very listed DLT.

Behmann visited three ComSoc Chapters in Morelos, Cuernavaca city; Puebla, Puebla city; and Monterrey, Monterrey city. He delivered two keynote lectures: "Disruptive Internet of Things: Evolution, Applications Architecture and Future Trends" and "Developing IoT Solutions for Smart Homes/Buildings, Smart Cars and Smart Energy."

On September 22, the day of his arrival, he visited Mexico City. The next day, he visited the magical town of Tlayacapan and the city of Cuernavaca. On September 24, he gave his first lecture on "Understanding Pre-IoT, IoT and Collaborative IoT (C-IoT) Model" at the National Institute of Electricity and Clean Energies (INEEL). After a general introduction to IoT and a broad vision on collaborative IoT, professor Fawzi focused on healthcare and wellness. He presented current and emerging solutions at hospitals, clinics, care centers and homes. He showed several examples of some of the related technologies such as 3D, robot, drone and wearables. Finally, the talk con-cluded with some of the factors and challenges to deliver scalable solutions, delivering better quality of services and experience.

On September 25, professor Behmann moved to Puebla. There, he participated as a Distinguished Lecturer in the "10th Seminar on Electronics and Advanced Design, 2018", with the keynote lecture "Developing IoT Solutions for Smart Homes/Buildings, Smart Car and Smart Energy" at the National Institute of Astrophysics, Optics and Electronics (INAOE). The session was focused on smart homes/buildings along with smart energy and smart cars exploring current and emerging solutions.

Professor Fawzi Behmann at the National Institute of Astrophysics, Optics and Electronics (INAOE), Puebla, Mexico.

The lecture covered architectural solution building blocks, including sensing, aggregation, and data analytics. Examples of some of the enabling technologies such as video surveillance, and drone were explored.

On the September 27 and 28 he gave the lectures: "Understanding Pre-IoT, IoT and Collaborative IoT (C-IoT) Model" and "Developing IoT Solutions for Smart Homes/Buildings, Smart Cars and Smart Energy" at the Technological and Higher Studies Institute of Monterrey (ITESM). Behmann challenged the public with a provocative question: Is there a common vision for IoT, 5G and Virtualization by 2020? The answer to the question could be found in his idea of disruptive Internet of things. The talks concluded with "some of the factors and challenges to deliver scalable solutions, delivering better quality of services and experience." To get there, these include development platforms, 5G, virtualization and security.

ComSoc Mexico Distinguished Lecturer Tour, September 2018.

Distinguished Lecturer Tour in Latin America, November 2018

By Joel J. P. C. Rodrigues, IEEE ComSoc Distinguished Lecturer, INATEL, Brazil, Instituto de Telecomunicações, Portugal

After attending the IEEE LATINCOM 2018, in Guadalajara, Mexico, we started a Distinguished Lecturer Tour (DLT) in three amazing countries of Latin America, Uruguay, Chile, and Bolivia, on November 17-23, 2018. Globally, it was a fantastic experience from both the personal and professional perspectives. The hospitality and welcome offered by colleagues from the local IEEE ComSoc Chapters and from the universities I visited was something so special that only can be explained when we feel the warm human vibration of these friendly people. Regarading

Joel Rodrigues presenting a Keynote at "Congreso TIC 2018" (Santiago de Chile).

Eduardo Trigo, Sandra Hidalgo, Joel Rodrigues at BETCON 2018 (Cochabamba, Bolivia).

the professional perspectives, the interest and enthusiasm of the attendees, with rooms full, was an excellent experience for knowledge exchange and great discussions. The main topic of my lectures was the Internet of Things, its challenges and perspectives.

In Uruguay, we visited the University of Montevideo and presented a lecture on November 19. We had an interesting discussion regarding IoT in Smart Cities and related initiatives where the colleagues are interested and participating. We were received by the team from the IEEE ComSoc Uruguay Chapter, Gustavo Giannattasio (Chair), Rafael Sotelo, and Juan Pechiar. On the same day, we traveled to Santiago de Chile.

On the first day in Chile, we were kindly received by Pedro Aguilera, the former Chair and current Vice-Chair of the IEEE ComSoc Chile Chapter. On November 20, we were accompanied by Diego Dujovne (the Chapter Chair), and I was honored to present a keynote at a national event called "Congreso TIC 2018" (ICT Congress 2018) (http://www.congresotic.cl/). This congress was jointly organized by the Universidad Diego Portales

First Technical/Administrative Meeting and Membership Drive of the IEEE ComSoc Nigeria Chapter

By Azuka Jude Ofogu, SMIEEE, IEEE ComSoc Nigeria Chapter Chair

The IEEE ComSoc Nigeria Chapter had its first administrative meeting and Membership Recruitment Drive for 2019 on Saturday, 26 January, 2019 at the University of Ilorin Auditorium, University of Ilorin permanent site, Ilorin, Kwara state, Nigeria. During the Event, Nigerian students were advised to take full advantage of the opportunities available with the IEEE and IEEE ComSoc, as Communications technology is a fertile ground for employment.

In his presentation, the IEEE ComSoc Nigeria Chair, Engr.

Attendees at the Nigeria Chapter meeting and membership recruitment drive.

Azuka Jude Ofogu, opined that the IEEE is the world's largest technical professional organization and that IEEE ComSoc, with more than 27,000 members in over 149 countries, is the right place to be.

In his own presentation on "Next Generation(5G) Mobile Communications Networks and It's Enabling Technologies," Engr. Joshua Bolarinwa of the Federal University of Technology, Minna, traced the history of the evolution of mobile communication networks and systems from first generation or 1G to 2G, 3G, 4G and now 5G. He described 5G as next generation mobile networks beyond 4G and that it is still open, yet to be standardized and that by 2020 we will have the first commercially available roll out of the technology. The vision and requirements for 5G, the potential application scenarios for 5G, mobile forcasting, etc., were also discussed. He described the five enabling technologies for 5G, including millimeter wave, small cell, full duplex, beamforming, and massive MIMO. The presentation ended with an analysis and discussion of the testing and deployment of 5G around the world and the opportunities it presents.

Dr. R. G. Jimoh, the Dean, Faculty of Communications and Information Sciences, University of Ilorin, admonished students to make good use of the opportunities offered by IEEE ComSoc and take advantage of the wealth of information in its database, which he said they can use to for networking, both locally and internationally. He also called on the students and staff of his faculty to come up with innovative ideas to attract industry attention.

In attendance were about 42 registered members of the IEEE and more than 700 guests, including the Dean of the Faculty of Communication and Information Sciences, lecturers, staff and students of the faculty and the entire engineering community of the Institution.

We have commenced registration of lecturers, staff and students with the goal of SB formation this academic quarter.

Going Global with the IEEE Malaysia ComSoc/VTS Joint Chapter

By Borhanudidin Mohd Ali and Aduwati Sali, IEEE Malaysia Com-Soc/VTS Joint Chapter

The ComSoc/VTS Joint Chapter was honored with the visit of the IEEE ComSoc Vice-President for Conferences, Stefano Bregni, on 13 October 2018. He met the ComSoc/VTS Executive Committee members to discuss our development and planning for the ensuing year. As part of his visit, he gave an insightful talk to members on ComSoc's vision, mission, its structure and mechanism, and how to maintain a high level of vibrancy in the Chapter. This kind of information is very helpful and encouraging for members to plan their future activities and make the chapter vibrant while bringing value to the membership. About 20 members attended the talk.

Apart from the membership development activity, the Joint

ComSoc VP-Conferences Stefano Bregni with members of the Malaysia ComSoc.VTS joint chapter.

Chapter also organized several technical talks on NOMA and 5G, particularly:

•Technical Talk by Prof. Huseyin Arslan on Wireless Radio Access for 5G and Beyond on 21 September 2018.

•Technical Talk on Multiple Access for 5G: A New Look at NOMA by Prof. Hikmet Sari on 8 June 2018.

•Distinguished Lecture Talk (DLT) by Prog. Tony Quek on Augmented Intelligence for Future Networks & Communications and Foundations of Adaptive Fog Computing & Networking on 7 March 2019.

The talks highlighted emerging issues in 5G and beyond, especially in access technologies. More than 50 postgraduate students and Com-

Attendees at the technical talks.

BRAINIAC National Student Technical Competition by IEEE ComSoc Lahore Chapter, Pakistan

By Kashif Bashir, IEEE ComSoc Lahore Chapter Chair, Pakistan

The IEEE ComSoc Lahore Chapter in collaboration with the Al-Khawarizmi Institute of Computer Science UET Lahore, the IEEE UET student branch and the IEEE Young Professional Lahore section, organized the Brainiac student competition on 20-21 December 2018 at UET Lahore. BRAINIAC is a national technical competition that provides opportunities for students to enhance and showcase their technical skills through a country-wide com-

Team Brainiac 2018: organizers, judges and students.

petition and win attractive cash prizes. BRAINIAC includes different competitions, including Software Project Competition, Engineering Project Competition, Student Poster Competition, Gaming Competition.

The convener of BRAINIAC 2018 was Prof. Dr. Waqar Mahmood. The organizers of BRAINIAC were Kashif Bashir (General Chair), Usman Munawar (General Secretary), Shahid Zulfiqar (Co-Chair/Logistics & Local Arrangements), Syed Rizwan Naqvi (Co-Chair/Finance & Registration) and Aftab Ur Rehman (Co-Chair/Outreach & Publicity)

A good number of participants at BRAINIAC 2018 was seen from universities all over Pakistan. This year the students who showed up at the competition were from universities that

Winner of the poster competition receiving the cash prize and certificate from Prof. Dr. Waqar Mahmood and Mr. Kashif Bashir at Brianiac 2018.

DISTINGUISHED LECTURER TOUR/*Continued from page 2*

(which hosted the event, in Santiago), the Universidad Técnica Federico Santamaría, the Universidad de Concepción, and the Universidad de la Frontera.

The third country of this DLT was Bolivia. We arrived on November 21, in Cochabamba, and was warmly received by the students of the IEEE ComSoc Bolivia Student Chapter, by Sandra Hidalgo (the Chapter Chair) and Eduardo Trigo (Treasurer and Industry Relations). I attended the most important IEEE event organized in Bolivia, BETCON (Bolivian Engineering and Technology Congress), and presented two keynotes, one focusing on IoT and the other addressing eHealth and mobile health technologies. BETCON 2018 (https://www.ucbcba.edu.bo/betcon-2018-ucb/) was organized by the Bolivia Students Chapter from the Universidad Católica Boliviana "San Pablo," chaired by Marcelo Greby Rojas. Congratulations for this excellent conference organization and scientific program!!! During this visit, I was honored to receive the "Recognition Award" from the Bolivia Chapter.

It was an excellent opportunity to meet extremely friendly and committed colleagues who share the IEEE Communications Society spirit and the passion for ICT technologies in their beautiful and lovely countries. Thank you!

MALAYSIA CHAPTER/*Continued from page 3*

Soc members benefited from the talks, esepecially in getting ideas and explanations on what could be the best research topics in wireless communications.

The talk by Prof. Quek highlighted the recent trend during the past decade which is to push various capabilities, such as computation, control, and storage, to the cloud. Such an over-dependence on the cloud, however, indicates that availability and fault tolerance issues in the cloud would directly impact millions of end-users. Such a cloud-centric architecture is not suitable for satisfying the demands of many delay-sensitive applications in future IoT. In viewing these challenges, the cloud is now "descending" to the network edge and diffuses among the client devices in both mobile and wired networks. Such a transition leads to the new paradigm of fog computing and networking. In the talk, an overview of fog computing and networking were discussed.

We look forward to hosting a few more technical talks in 2019 by renowned speakers in the areas of wireless communications, especially on issues pertaining to 5G and beyond, as Malaysia joins the telecommunication world to deploy 5G infrastructure and services in the country.

BRAINIAC/*Continued from page 3*

included UCP Lahore, COMSATS Islamabad, Swedish College of Engineering & Technology, University of Engineering & Technology (UET) Lahore, FAST NU Lahore, NUST Islamabad, University of South Asia, University of Gujrat, University of Sialkot, University of Agriculture Faisalabad (UAF), University of Lahore Gujrat Campus, University of Management & Technology (UMT) Lahore, Punjab University, Sarhad University KPK, COMSATS Lahore and LUMS Lahore.

The judges were Dr. Muhammad Atif and Dr. Yasir Niaz from the University of Lahore, Dr. Sajid Mahmood and Syed Mohsin Ali from UMT Lahore, Tanveer Bukhari from the University of South Asia Lahore, Dr. Sheikh Faisal Rashid, Dr Yasir Saleem and Ubaid Ullah Fiaz UET Lahore, Mr. Shahzaib Rathore, Advance System, Shahid Qayyum from PITB Lahore, Dr. Annika Hinze from the University of Waikato New Zealand, Dr. Ali Imran from the University of Oklahoma, United States, Mr. Ammar from UAF Faisalabad, and Dr. Amjad Hussain from FAST NU Lahore.

There were 240 participants from 14 universities presenting their 92 projects including 30 gaming teams. The event was attended by 1000 visitors, with 50 volunteers participatingt. There were 14 judges on the panel, with six sponsors of the BRAINIAC student competition.

Rs.100,000 prize money was distributed among the winning teams in the four categories of the BRAINIAC Student Competition 2018.