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REGIONAL REPORT

IEEE ComSoc Iraq Chapter Activities Continue Despite the Severity of the Situation Inside Iraq

By Sattar Bader Sadkhan, Chair of IEEE Iraq Section

It is well known to the world how serious the situation is inside Iraq due to the terrorists activities of the ISIS-Daaish forces since June 2014. At that time very dangerous attacks were happened against one of the biggest cities in IRAQ, Ninawa, with a population of approximately 3,000,000. This occupation by the terrorism forces expanded to other cities (Tel-afar, Tikrit, Diyala, Kirkuk, Anbar, and Babylon). One of catastrophic results is the internal displacement of thousands of families from these cities to other cities. Approximately 3,000,000 people were internally displaced to many other cities such as Erbil, Duhook, and Sulimanyia, in the Kurdistan Region, as well as Baghdad, Kerbala, Al-Najef, Babylon, Waset, Al-Qadisyia, Missan, and ThiQar.

Prof. Dr. Sattar B. Sadkhan, the chair of the ComSoc Chapter, has made many visits during the past year to many campuses for displaced people, and six visits to the "Zuhair Al-Azdy Primary School" for displaced students established in Babylon City. One little girl's smile tells the story of the important work being done by Prof. Sadkhan and his fellow IEEE volunteers.

Our country has experienced much hardship in recent times, as can be seen in the effect on many daily activities of the people. Many members of the IEEE Iraq Section have faced extremely sad circumstances. They are professors in universities in these cities that were occupied by terrorism forces. However, the spiritual pain felt by the Iraq IEEE members has strengthened their desire to continue to volunteer to visit displaced families and offer them any possible support.

An Overview of IEEE Iraq ComSoc Chapyter Activities in Iraq

The IEEE Iraq ComSoc Chapter has been in operation since 2011, and in that time has taken major steps to expand activities, including conferences, workshops, specific lectures, and many social activities. The IEEE Iraq volunteers support the educational institutions by introducing the core values and objectives of the IEEE, as well as scientific activities that assist in promoting the communication engineering profession. Iraq has 18 cities and many rural regions that are not easy to access. As such, a major effort is required to distribute the activities throughout the country. The dedication of the IEEE Iraq ComSoc Chapter volunteers has made this possible.

Prof. Dr. Sattar B. Sadkhan, the chair of the ComSoc Chapter, has made many visits during the past year to many campuses for displaced people, and six visits to the "Zuhair Al-Azdy Primary School" for displaced students established in Babylon City. The volunteer team of the IEEE Iraq ComSoc Chapter spent the entire visit day listening to the hardships of the displaced students, educating them, and providing them with these words of inspiration: that this will all pass and that they have a bright future ahead.

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Effectiveness of ComSoc DLT Program and Workshops in New Zealand

By Nurul I Sarkar, IEEE Joint NZ North, South and Central ComSoc Chair

The IEEE New Zealand (NZ) Communications Society (ComSoc) Chapter is a joint chapter of the IEEE NZ North, South, and Central Sections. This is a NZ-wide chapter that was formed in July 2014 as a result of the splitting of the NZ North joint chapter COM019/SP001/IT12. However, last year (2014) was a very productive for us from the perspective of professional development of the members of the society and the wider community.

Being a ComSoc chapter chair, Associate Professor Nurul Sarkar had nominated Professor Ekram Hossain (University of Manitoba, Canada) as IEEE ComSoc Distinguished Lecturer (DL). Professor Hossain gave three public lectures (covering the three major cities of NZ) in Christchurch, Wellington, and Auckland on November 10, 11, and 13, respectively. All three talks went very well for the professional development of the members of the society and the wider university community. A brief description of each of the talks is highlighted below.

Professor Hossain gave his first DL talk at the University of Canterbury, Christchurch on Monday, 10 November. This talk was organized by Professor Harsha Sirisena. Thanks go to Professor Krys Pawlikowski, who took over the role of organizing chair for the DLT tour in the absence of Professor Sirisena. Approximately 25 people attended the talk, and after the session there was a good discussion about the future generation cellular wireless networks, including 5G systems.

Next, Professor Hossain gave a talk in Wellington on 11 November which was organized by Dr Terence Betlehem. The talk went very well and was attended by more than 30 people, mostly from industry. There were a number of research students from Victoria University of Wellington attending the talk. After the talk the participants visited research laboratories, including the Sensing and Automation research labs.

DL-NSRG Workshop Attendees in Auckland

In Auckland, the DL talk was held at Auckland University of Technology (AUT), Auckland CBD. AUT's School of Computer and Mathematical Sciences (Network and Security Research Group) hosted this event in conjunction with a day-long Network and Security Research Group (NSRG) workshop on Thursday, 13 November, 2014. Associate Professor Jairo Gutierrez (head of Computer Sciences) gave an opening talk and outlined the program for the day. There were a series of presentations given by DLs, invited speakers, and research staff and students. In addition to Professor Hossain, we had two other high profile speakers: Professor Jaafar Elmirghani (University of Leeds, UK), and Professor Krys Pawlikowski (University of Canterbury, Christchurch). Professor Elmirghani's talk was hosted by the IEEE joint NZ North, South, and Central ComSoc Chapter and Network and Security Research Group (NSRG), AUT. The first DL talk presented by Professor Hossain, "Evolution Towards 5G Cellular Networks: Radio Resource and Interference Management Issues," was very interesting. Professor Hossain focused on the vision and requirements for 5G cellular networks, device-to-device communications, enabling technologies for 5G networks, and interference management challenges in 5G multi-tier networks. Some issues and open research areas were discussed.

Next, Professor Elmirghani gave an impressive talk on "Greening Core, Data Centre and Content Distribution Networks." More on Elmirghani's talk in other cities is discussed later in the report. Professor Pawlikowski then gave a useful talk on aspects of simulation credibility in telecommunication networks. The tutorial style presentations helped the audience understand the technical subjects very well. After each talk there was ample opportunity for question and answer and further discussion.

Among the other 10 presenters, Dr. William Liu gave a short presentation on "Energy Efficient and Resilient Network Design." The remaining nine Ph.D. students from NSRG gave mini presentations on the day. This event was financially supported in part by NSRG (AUT), IEEE ComSoc, and IEEE Region 10. Despite the busy time of year approximately 40 people (approximately 25 IEEE and 15 non-IEEE members) within and outside of AUT attended the event. People enjoyed talking and networking during coffee and lunch breaks. Organizing chair Associate Professor Nurul Sarkar received positive feedback from the participants, indicating that the event was successful.

Professor Elmirghani's DL Talks in Wellington and Dunedin

In addition to the talk at Auckland, Professor Elmirghani gave two other lectures, one in Wellington (11 November) and the other in Dunedin (14 November). The lecture in Wellington was organized by Dr. Mansoor Shafi, hosted by the IEEE NZ Central Section. Professor Elmirghani gave his final talk at Otago Polytechnic, Dunedin. This talk was organized by Dr. Tom Qi and hosted by the IEEE NZ South Section.

In both lectures, Professor Elmirghani highlighted the measures that can be used to reduce the power consumption of the Internet. Among the key measurers, Professor Elmirghani focused on the following: optimum use of time varying renewable energy in core networks; physical topology design consider-

(Continued on next page)

IEEE ComSoc DL-NSRG workshop attendees in Auckland. Left front row sitting: Professor Jairo Gutierrez, AUT, Professor Ekram Hossain, DL, (University of Manitoba), Professor Jaafar Elmirghani, DL, (University of Leeds, UK), Professor Krys Pawlikowski (University of Canterbury) and A/Professor Nurul Sarkar, AUT.

DLT Tour in New Zealand/*Continued from page 2*

ing operational and embodied energies; elastic optical networks using mixed line rates and optical OFDM; optimum resource allocation and green network design with data centers; dynamic energy-efficient content caching; energy-efficient peer-to-peer content distribution; energy-efficient distributed clouds; and energy-efficient network virtualization. The talks generated a lot of interest among the participants for further discussion and collaboration.

Professor Jayasumana's Invited DL Talk in Auckland

Professor Anura Jayasumana (Colorado State University, USA) visited both Christchurch and Auckland and gave invited DL talks. The effectiveness of Professor Jayasumana's talk in Auckland is briefly discussed below. The lecture was held at AUT on Thursday, 20 November, 2014. The talk, "Topology Coordinate System: A Novel Domain for Self-Organizing Large-Scale 2D and 3D Sensor Networks," generated much interest among the participants, and there was a good discussion and question and answer session after the talk. This event was jointly supported by AUT's School of Computer and Mathematical Sciences and the IEEE NZ North Section. Approximately 25 people attended the talk (mostly staff and students), and one IEEE member travelled from Whangarei (about 160 km North of Auckland) to attend the talk.

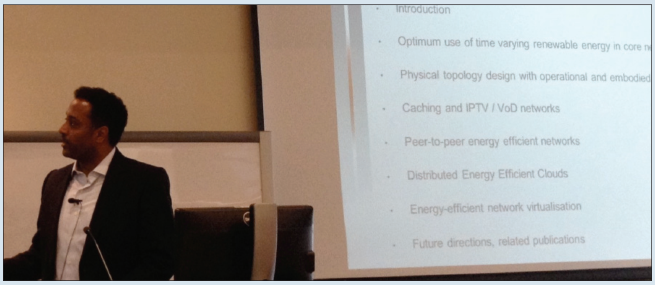
2014 IEEE NZ Wireless Workshop

The IEEE NZ ComSoc chapter organized a day-long IEEE NZ Wireless Workshop held on Friday, 5 September, 2014 at the University of Canterbury, Christchurch. This annual event brought together more than 70 engineers, researchers, industrialists, and policy makers working in the field of wireless communications and network technologies. There was a series of presentations by the participants from industry, wireless research centers, and academia, with ample opportunity for informal discussion and networking. The presentations covered various topics and provided a forum for experts in the wireless industry and academia to discuss innovative technologies and research currently being undertaken.

Conclusion

ComSoc DLT programs and workshops were very productive in 2014. We had three high profile IEEE DLs (Professor Ekram Hossain, Professor Jaafar Elmirghani, and Professor Anura Jayasumana) who travelled to NZ and gave several lectures in the major cities of NZ. In addition to the professional development of the members of the society and the wider community, we had ample opportunities for international links and collaboration. In summary, IEEE DL programs were very effective for the attendees for networking, forming academy-industry links, and sharing ideas. The DLT tour to NZ was supported by IEEE ComSoc, Region 10, IEEE NZ North, South, and Central Sections, and AUT University.

IEEE DL Prof Jayasumana's talk attendees in Auckland.


Introduction
Optimum use of time varying renewable energy in core n
Physical topology design with operational and embodied
Caching and IPTV / VoD networks
Peer-to-peer energy efficient networks
Distributed Energy Efficient Clouds
Energy-efficient network virtualisation
Future directions, related publications

Invited DL Professor Jaafar Elmirghani's talk in Dunedin.

2014 IEEE NZ Wireless workshop participants.

ComSoc 2015 Election: Take Time to Vote

Ballots were e-mailed and/or postal mailed 29 May 2015 to all Higher Grade* IEEE Communications Society Members and Affiliates (excluding Students) whose memberships were effective prior to 1 May 2015. You must have an e-ballot or paper ballot before you can vote.

Vote Now using the URL below. You will need your IEEE Account username/password to access the ballot. If you do not remember your password, you may retrieve it on the voter login page.

https://eballot4.votenet.com/IEEE

If you have questions about the IEEE ComSoc voting process or would like to request a paper ballot, please contact ieee-comsocvote@ieee.org or +1 (732) 562-3904.

If you do not receive a ballot by 30 June, but you feel your membership was valid before 1 May 2015, you may e-mail ieee-comsocvote@ieee.org or call +1 (732) 562-3904 to check your member status. (Provide your member number, full name, and address.)

Please note IEEE Policy (Section 14.1) that IEEE mailing lists should not be used for "electioneering" in connection with any office within the IEEE.

Voting for this election closes 24 July 2015 at 4:00 p.m. EDT! Please vote!

*Includes Graduate Student Members

CONFERENCE REPORT

Tutorial Sessions on Quantum and Optical Wireless Communications and Exhibition at IEEE TENCON 2014, Bangkok, Thailand

By Kamol Kaemarungsi and Keattisak Sripimanwat, Thailand

During IEEE TENCON 2014 held October 22–25, 2014 in Bangkok, Thailand, the IEEE ComSoc Thailand Chapter assisted the local organizer by setting up three tutorial sessions for the conference, and also joined as a speaker in the IEEE leadership and membership development forum.

For more than three decades, TENCON of the IEEE Region 10 or Asia Pacific Region has been served as a networking and discussion forum for researchers and engineers in electrical and electronics engineering, computer science, and related fields. This year the IEEE ComSoc Thailand Chapter chair was invited to present our past and current activities in promoting the IEEE Communications Society and membership in Thailand in the IEEE leadership and membership development forum. We highlighted our continuous communications with our local audiences with monthly e-newsletters, special technical lectures, and free telecommunications related e-books.

The first tutorial session was entitled "Optical Wireless Communications: Challenges and Perspectives," presented by Dr. Anh T. Pham, who is a senior associate professor at the Computer Communications Laboratory, the School of Computer Science & Engineering at the University of Aizu, Japan.

The second tutorial session was entitled "The Language of Lighting Design," delivered by Dr. Chanyaporn Chuntamara, who is the head of the Lighting Research and Innovation Center (LRIC) at the King Mongkut's University of Technology Thonburi, Thailand.

The last tutorial session was entitled "Principle of Quantum Communication," presented by Dr. Suwit Kiravittaya, who is a lecturer from the Department of Electrical and Computer Engineering, Faculty of Engineering, Naresuan University, Thailand.

During the conference, our chapter also exhibited the Thai Telecommunications Knowledge Management (TTKM) project to the conference participants. This project is our continuous project that provides a free web portal, which archives telecommunications related resources for Thai people. The web portal contains links to the IEEE ComSoc Thailand Chapter website, the Thai Telecommunications Encyclopedia, and other related material.

Presentation of the IEEE and Thai Telecommunications History & Milestones book to Prof. Michel Howard, 2014 IEEE President-Elect.

During the event our chapter also presented a book of IEEE and Thai Telecommunications History & Milestones to Prof. Michel Howard, 2014 IEEE President-Elect. For more information please visit us at www.thaitelecomkm.org.

IRAQ COMSOC CHAPTER/*Continued from page 1*

We feel that these children are "Our little angels, and all of our wishes are directed at providing them with shelter and security, to give them happiness so that they can go back to their homes that they see only in their dreams".

The chair of IEEE Iraq ComSoc Chapter and many volunteers have visited many places in and around Babylon City offering any possible assistance. In all these areas, we have thousands of families who have been expelled from their homes in northern and western Iraq or left them in fear. Our regular visits provide a good picture about the status of these families. We have also made major efforts to visit the primary schools. Many of the IEEE Iraq ComSoc chapter members and their families have been collecting "financial support" for these students.

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