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CHAPTER REPORT

IEEE ComSoc Iraq Chapter Activities Through Year 2020

by Prof. Sattar B. Sadkhan, Chair of IEEE ComSoc Iraq Chapter, University of Babylon, Iraq

During 2020, the Chapter participated in scientifically supporting the organization of six International Conferences technically sponsored by IEEE inside Iraqi universities. Most of these conferences were held virtually, due to the existence of COVID-19 and also the critical political situation in many Iraqi Cities, which started on 15 October 2019. The main tasks of IEEE ComSoc Iraq Chapter members were working as volunteers to scientifically enhance the good organization, and attracted academics (from Iraq and outside Iraq) for participation in these conferences. Three of these conferences were held in the Kurdistan Region (North of Iraq):

1. IEC-2020: 6th International Engineering Conference on Advanced Science and Engineering (February 2020) at Ishik International University- Erbil City
2. CSASE2020: International Conference on Computer Science and Software Engineering (April 2020) at Duhok University-Duhok City
3. ICOASE2020: Third International Conference on Engineering Technology and Its Applications (December 2020), hold in cooperation between Zakho University and Duhok Polytechnique University (DPU). The conference was organized virtually from DPU-Duhok City.

The other three conferences were held in:

4. IT-ELA 2020: 1st Information Technology to Enhance E-Learning and Other Applications (April 2020) at Baghdad Economic University College, Baghdad City
5. 2nd NICST 2020: 2nd Al-Noor International Conference for Science & Technology (August 2020), Baghdad City.
6. IICETA20: Third International Conference on Engineering Technology and Its Applications (December 2020), held at Islamic University-Najaf.

The main efforts paid by the volunteer members of IEEE ComSoc Iraq Chapter concentrated on encouraging the universities to go ahead in organization of such online conferences, and we visited these universities many times and discussed with the organizers the importance of going ahead in establishing such scientific conferences (within the existence of critical health status, and a very critical political situation) inside our country – Iraq.

Women Members of the scientific committee of the conference 6th-IEC 2020 with Sattar B. Sadkhan, Chair of IEEE ComSoc Iraq Chapter. We highlight the role of the women in such important activities.

Sattar B. Sadkhan (at right), Chair of IEEE ComSoc Iraq Chapter, with the Dean of Baghdad Economic University College (at left) at the IT-ELA 2020 conference.

The volunteer team of organizers of IT-ELA 2020 from the IEEE ComSoc Iraq Chapter

CONFERENCE REPORT

The 29th International Conference on Software, Telecommunications and Computer Networks: SoftCOM 2021

by Dinko Begusic, Nikola Rozic, Josko Radic, Matko Saric, Katarina Rados, University of Split, Croatia, Sinisa Krajnovic, Ericsson, Pascal Lorenz, University of Upper Alsace, France, Joel J. P. C. Rodrigues, Senac Faculty of Ceará, Fortaleza-CE, Brazil; Instituto de Telecomunicações, Portugal

The 29th International Conference on Software, Telecommunications and Computer Networks — SoftCOM 2021 — was held in a hybrid format, including live and virtual participation, in the attractive ambience of the Amfora Hvar Grand Beach Resort on the island of Hvar, Croatia, 23 to 25 September, 2021. The Conference was technically co-sponsored by the IEEE Communications Society (ComSoc) with the support of the Technical Committee on Communications Software (CommSoft) and the IEEE Croatian Section. The Conference was organized by the University of Split, Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture (FESB) and the Croatian Communications and Information Society (CCIS) under the auspices of the Croatian Academy of Engineering.

The technical conference program featured 15 conference sessions, including special sessions dedicated to: QoS in Wired and Wireless Networks, Ad Hoc & Sensor Networks, the Internet of Things, Green Networking and Computing, Security and Digital Forensics, Smart Environments and IoT, Advances in Data Analytics, Environmental Electromagnetic Compatibility, and Advanced Educational Technologies. In addition, a symposium on Robotics and ICT Assisted Wellbeing was organized in collaboration with research groups from the International Hellenic University (IHU), Greece, and the Institute of Robotics, Bulgarian Academy of Science, Bulgaria. Three half-day tutorials were held by recognized experts. The interdicsiplinary Symposium on Information Security and Intellectual Property was organized in collaboration with the University of Split, Faculty of Law, and the University of Zagreb Faculty of Electrical Engineering and Computing. The authors of selected papers have been invited to extend their papers and submit them for publication in the *Journal of Communications Software and Systems*.

The keynote talk, "AI for Telecom and Beyond," was given by Elena Fersman, Ph.D., head of Global AI Accelerator, Ericsson, Sweden, and moderated by Sinisa Krajnovic, Ericsson. It was focused on the potential benefits from AI with respect to automation in networks, and new values that can be created for the industries. An invited talk, "The New Economic Attitude in the Information Era," was presented by Marcelo Sampaio de Alencar, Ph.D., president of the Institute for Advanced Studies in Communications, Brazil. At the beginning of the plenary session, the audience was addressed by Prof. Srdjan Podrug, the Dean of the Faculty of Electrical Engineering, Mechanical Engineering, and Naval Architecture (FESB), and Prof. Mario Kusek, member of the Executive Committee of the IEEE Croatia Section, faculty of electrical engineering and computing, University of Zagreb.

The accompanying SoftCOM 2021 Business Forum featured professional workshops with participation of managers, executives, experts, and institution representatives. A professional 27th Workshop on ICT featured a set of presentations of professional contributions in the area of ICT. The 10th Workshop on Software Engineering in Practice was organized by Darko Huljenić, Ph.D., Ericsson Nikola Tesla, Croatia. The Workshop on Smart Cities and Advanced Technologies included presentations and discussions of the vision and main strategical goals of the Smart City strategy of the City of Split. Examples and use cases of smart city solutions were presented. The workshop was moderated by Nenad Marjanović, Combis d.o.o., Hrvoje Strepački, Atos Convergence Creators Ltd, and Prof. Sven Gotovac, University of Split, FESB.

Chatting during the coffee break in attractive ambience of the Amfora Hvar Grand Beach Resort at the island of Hvar, Croatia

Gathering for the walking tour towards the City of Hvar fortress from the 16th century.

The SoftCOM 2021 conference has been held in attractive ambience of the Amfora Hvar Grand Beach Resort at the island of Hvar, Croatia

SoftCOM 2021 featured two events aimed at students in the area of ICT. The Ericsson Nikola Tesla Summer Camp 2021 Workshop aimed to present the achievements of the jubilee 20th Ericsson Nikola Tesla Summer Camp. Twelve student projects were presented in the form of a poster session, preceded by a fast-paced introduction with participation of the members of the steering committee Darko Huljenić , Ericsson Nikola Tesla, Zagreb, Prof. Maja Matijašević and Prof. Mario Kušek, Gordan Ježić, University of Zagreb, and Prof. Dinko Begušić, University of Split. iPANEL: Summer Camp Innovation Challenge featured presentations of innovative ideas based on the Ericsson Nikola Tesla Summer Camp projects. The workshops were moderated by Ivana Nižetić Kosović, Ph.D., and Toni Mastelić, Ph.D., Ericsson Nikola Tesla, Split.

More information on SoftCOM 2021 may be found at http://softcom2021.fesb.unist.hr/.

DISTINGUISHED LECTURER

Stay Connected to the IEEE Communications Society via the Virtual Distinguished Lecturer Program at the Far North Queensland Region

by Tao Huang, Member, and Mohan Jacob, Chapter Chair, Northern Australia Section, Joint Chapter MTT17/COM19

In Australia, 2021 was challenging for domestic and international travel due to state and territory border closures. Our Northern Australia Section Joint Chapter, MTT17/COM19, is located in Far North Queensland. The travel restrictions and border closures made it impossible for us to organize face-to-face Distinguished Lecturer seminars as we are located in Australia's regional area.

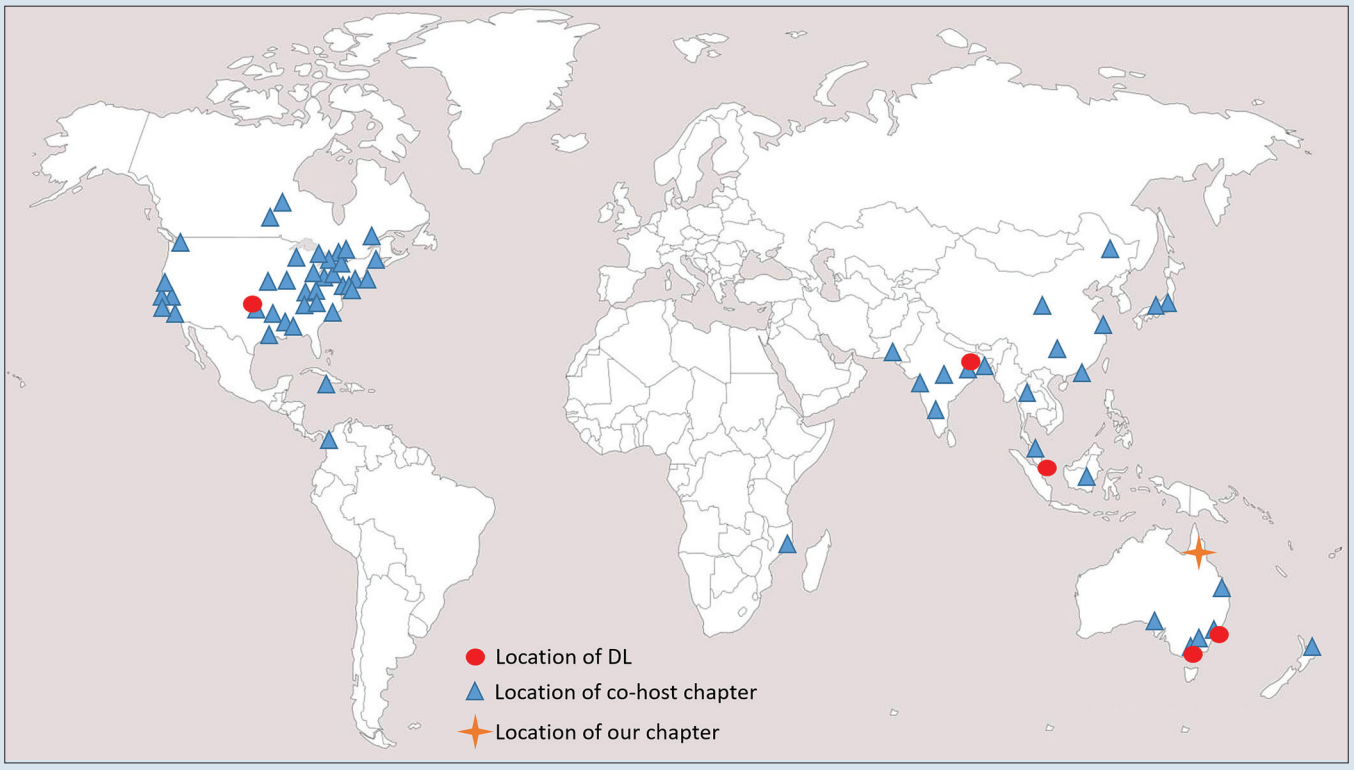
However, the development of communications technology enables us to communicate online in real time. People can talk and see each other, and share files and perform presentations online. People can use various devices such as PCs, tablets, or smartphones to participate, and the number of participants can be quite large.

Thus, with the support of the IEEE Communication Society for promoting the online Distinguished Lecturer Program (DLP) and the available communication technology, our Chapter had the opportunity to co-host a few virtual Distinguished Lecturer (VDL) seminars in 2021, together with many other Communications Society Chapters worldwide. It enabled our local Communication Society members to meet and chat with the leading researchers worldwide online.

The list of the VDL seminars co-hosted by our Chapter in 2021 is the following. The figure shows the locations of the DLs, the locations of the co-host Chapters, and the location of our chapter. In total, we interacted with 5 DLs and over 70 co-hosting Chapters.

- On 29 May 2021, we co-hosted a VDL seminar on "UAV Networks: Architectures, Opportunities, Challenges, and Future" presented by Prof. Sudip Misra from the Indian Institute of Technology, India. The lead host was Associate Prof. Nurul Sarkar of New Zealand North/South/Central Jt. Chapter COM19.
- On 6 July 2021, we co-hosted a VDL seminar on "Integrated Micro-photonics for Terahertz Systems," presented by Dr. Daniel Headland from the University of Adelaide, Australia. The lead host was Dr. Morteza Shahpari of South Australia Section Jt. Chapter AP03/MTT17.
- On 25 August 2021, we co-hosted a VDL seminar on "Harmonising Engineering Education with Nature," presented by Associate Professor Nemai Karmakar from Monash University, Australia. The lead host is Dr Fatemeh Babaeian in Victorian Section Jt. Chapter AP03/MTT17.
- On 06 October 2021, we co-hosted a VDL seminar on "Absorptive Frequency-Selective Structures," presented by Prof. Zhongxiang Shen from Nanyang Technological University, Singapore. The lead host was Dr. Hugo Espinosa of Queensland Section Jt. Chapter AP03/MTT17.
- On 29 October 2021, we co-hosted a VDL seminar on "Connecting Space Assets to the Internet: Challenges and Solutions," presented by Prof. Mohammed Atiquzzaman from the University of Oklahoma, USA. The lead host was Assistant Professor Dr Zheng Peng, New York Section Chapter COM19.

With Australia's state and territory borders open in 2022, we will gradually go back to our routine before the pandemic. We will more likely organize the Distinguished Lecturer seminars face-to-face whenever possible. After all, it is always better to have face-to-face discussions and see each other in person. However, it may still be beneficial to organize VDL seminars or face-to-face DL seminars with online sessions whenever it is possible. In this way, we can continue to benefit more members who may not be able to travel due to work arrangements. In addition, we can continue to stimulate international collaborations via online activity.



CONFERENCE REPORT

IEEE GLOBECOM 2020 in Taipei and Foxconn's Newly Established Hon Hai Research Institute

by Chia-Han Lee, Chair of IEEE ComSoc Taipei Chapter, Taiwan

IEEE GLOBECOM 2020 was successfully held in Taipei. As the first GLOBECOM/ICC ever to be held in hybrid mode (due to the pandemic situation), IEEE GLOBECOM 2020 innovated the way the ComSoc flag conference is organized. Even though many attendees had to cancel their trips to Taiwan due to travel constraints, IEEE GLOBECOM 2020 provided a novel and enjoyable experience for every attendee, no matter whether they attended physically or virtually.

Among the six keynotes of GLOECOM 2020, three speakers were from Taiwan-based companies, MediaTek, Foxconn, and Chunghwa Telecomm. MediaTek and Foxconn are internationally well-known companies in design and manufacture of wireless products. MediaTek is the world's fourth largest global fabless semiconductor company and became the biggest smartphone chipset vendor in 2020, while Foxconn is the world's largest electronics manufacturer with business covering cloud computing, mobile devices, IoT, big data, AI, smart networks, semiconductors, robotics/automation, electric vehicles, and digital health. The CEO of MediaTek, Dr. Rick Tsai, gave a keynote speech, "Accelerating the Digital Economy Post Covid-19 Pandemic," envisioning the trends of the technologies that help accelerate the digital economy during and even after the pandemic, and in particular, the role that IC design plays in achieving the technological advancement. Dr. Jay Lee, the Vice Chairman of Foxconn, virtually delivered a keynote speech on the theme of "Industrial AI for Smart Digital Transformation," sharing his views on how to apply 5G, AI, IoT, and other emerging technologies in smart manufacturing to enhance industrial transformation. Both MediaTek and Foxconn also showcased their prowess in the design and manufacture of 5G equipment in the physical exhibition at GLOBECOM 2020.

The exhibition of Foxconn at GLOBECOM 2020 was arranged by the Hon Hai Research Institute (HHRI), a newly established research institute of Foxconn (note that the research institute is named following the alternative name of Foxconn Technology Group and the Hon Hai Technology Group). The establishment of the HHRI is an important step in Foxconn's development strategy as the company moves one step closer to its "Foxconn 3.0" transformation. Dr. Jen-Ming Wu, a member of the IEEE ComSoc Taipei Chapter and a professor at National Tsing Hua University, was recently appointed as the director of the Next-Generation Communications Research Center, one of the five research centers of HHRI (the other four are the AI Research Center, Semiconductor Research Center, Information Security Research Center, and Quantum Computing Research Center). The Next-Generation Communications Research Center of HHRI focuses on the development of core technologies for B5G/6G and next-generation networks. The center explores ways to apply the research, combined with insights from intelligence and semiconductor technologies, to advanced communication technologies such as vehicle to everything communications and low Earth orbit (LEO) satellite communications, with the end goal of setting new standards within the industries.

For those who missed the chance to visit Taipei for IEEE GLOBECOM 2020 due to the pandemic, here is good news for you: Taipei will host IEEE GLOBECOM 2025! The ComSoc Taipei Chapter, therefore, would like to invite you to attend IEEE GLOBECOM 2025 and visit beautiful Taipei City. You may also visit HHRI, and I am sure Dr. Wu would be more than happy to welcome you!

Keynote by Dr. Rick Tsai, CEO of MediaTek, at IEEE GLOBECOM 2020, a hybrid conference with physical and virtual attendees.

Inauguration ceremony for Foxconn's Hon Hai Research Institute on Jan. 4, 2021. Fourth from the right is Terry Gou, the founder of Foxconn.

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