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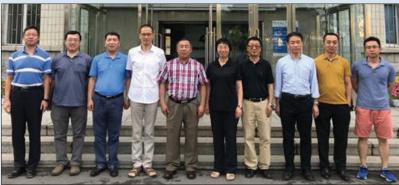
**CHAPTER REPORT** 

# **Great Development of the IEEE Communications** Society in the College of Communication **Engineering, Jilin University**

By Fengye Hu, College of Communication Engineering, Jilin University, Harbin ComSoc Chapter, China

In the past few years, Prof. Fengye Hu has organized and attended many IEEE activities actively, such as IEEE/ CIC ICCC 2019, IEEE GLOBECOM, IEEE ICC, and other events organized by the IEEE ComSoc Harbin Chapter. He tried his best to attract more talent to attend the Harbin Chapter so that the quantity and quality of the membership has improved significantly. Some important events which he joined are as follows.

- 1. He served as an Executive Co-Chair and hosted the 8th IEEE/CIC International Conference on Communications in China (ICCC 2019) held in Changchun, China, 11-13 August 2019.
- 2. He invited more than 50 visiting academic professors, such as Prof. Weihua Zhuang, Prof. Xuemin (Sherman) Shen and Prof. Nei Kato etc. to visit Jilin University last year.
- 3. He served as an editor of IET Communications and China Communications.



IEEE ComSoc academic activities in 2018.



Khaled Ben Letaief, president of IEEE ComSoc, delivered a welcome message to IEEE/CIC ICCC

During these essential events, Prof. Hu has pointed out that IEEE ComSoc promoted the advancement of science, technology and applications in communications and some other related disciplines. In addition, his report included that IEEE ComSoc fostered the exchange of information among the members and technical community all around the world, which maintained IEEE ComSoc competitiveness.

In daily life, he introduced some issues about IEEE Com-Soc in the College of Communication Engineering frequent-

> ly, such as an overview, development history, member grades, and its international influence. After his meticulous explanation, most students realized that it was a good decision to join IEEE ComSoc due to expanding horizons. Many of them have contacted Prof. Hu and expressed their strong desire to join IEEE ComSoc. As a result, more than 50 students registered as IEEE student members and IEEE ComSoc members with the help of Prof. Hu last summer.

> We believe that Prof. Hu and these new student members will make greater effort to contribute to the development of IEEE ComSoc in the future.

## 5G, More 5G, and Even More 5G! Updates from the Garden City of India

By Dilip Krishnaswamy, IEEE ComSoc Bangalore Chapter Chair,

Lately, there has been a surge in the number of 5G Summits being hosted around the world. Now, we had hosted only one 5G workshop in Bangalore in 2018, and we felt that that was a little too few. Not wanting to be left behind, we decided to host not just one 5G summit, or two 5G summits, but a whopping three 5G Summits in 2019!! Well, we are done with two, and we had a third one in late November to round out our spectacular 5G show in Bangalore! Sincere thanks to the IEEE 5G Summits and the IEEE Future Networks team at IEEE ComSoc for indulging us for all three summits!! Now, we wish we could have a record fourth summit this year, but Santa Claus would have none of it. Well, we have tried our best and we must say that the summits were very well attended, and by more people than just the speakers and the IEEE ComSoc volunteers, and hopefully they did come for 5G and not just the marvelous vegG and nonvegG food that we served them.

As we started plotting for more 5G Summits for 2020 (we were thinking of seven 5G Summits actually), our chapter was asked to host the third IEEE 5G World Forum on 10-12 September 2020 in Bangalore. Now, we are all excited and looking forward to it, and we do hope that the momentum from the recent 5G Summits will help culminate in a nice 5G World Forum next year. However, we will be so busy with the 5G World Forum that we will not have time to host any more 5G Summits in 2020. The conspiracy theorists among us think that this was a deliberate move from IEEE ComSoc to arrest our march on hosting more 5G Summits. Perhaps we will just have a 6G Summit instead after the 5G World Forum.

Now, we all love each other so much in the Bangalore chapter that we just want to meet each other more often than the 5G Summits and the boring regular chapter team meetings would permit. So we started a Study Group starting with a cool topic on "Massive MIMO". These study group discussions have been informal in nature, and inevitably everyone's ignorance



The attendance of the event was impressive.

came to the fore, but it was enjoyable learning! We now plan to move on to "Quantum Communications", another funky topic to lure the truly last remaining folks on the fence who have not yet paid the chapter fees to join the chapter. Now as we lure them in, we hope they stay. As regards the Quantum realm, none of us know whether Schrodinger's cat is truly alive or not, but Quantum is cool, and we are looking forward to exploring it. These study groups are fun, and we hope that you folks in other chapters try them out too!

Now we are on to more cool stuff, such as hosting a fun Drones conclave, and an ITS workshop related to autonomous vehicles. We held research methodology workshops to encourage students to pursue research, and we are planning to host a summer school for students in 2020. We hosted a graduate student thesis competition for M.S./Ph.D. students (all the awards were won by brilliant women engineering students). Many volunteers participated in a WiE Leadership summit that was held

So we are all having fun, giving un-invited talks, barging into keynote slots at local conferences, and the like, and we are keenly engaged with local academia, government, and industry and exploring new areas such as IoT, Smart Cities, 5G, AI/ML, Robotics, Blockchain, Drones, and Data Privacy. So please do come to Bangalore and visit us, and be sure to submit a paper to the IEEE 5G World Forum next year! Cheers!

Dilip Krishnaswamy is Chair of the IEEE Comsoc Bangalore Chapter, India, and Reliance Fellow and VP (New Tech R&D), Reliance Industries Ltd.

#### DISTINGUISHED LECTURER TOUR

# Saudi Arabia ComSoc Chapter Hosts 5G Network Slicing DLTs

By Abdullah S. Almuttiri, Saudi Arabia Chapter Chair

The Saudi IEEE Communication Society (ComSoc) chapter strives to serve his members through a variety of scientific and social activities. This time, Dr. Abdullah Almuttiri, ComSoc Saudi Chapter Chair, invited Prof. Adlen Ksentini, who is a distinguished lecturer for ComSoc and a professor of Communication Systems in EURECOM France, for a DLT in Saudi Arabia. This tour included three distinguished lectures in three different cities within Saudi Arabia, Madinah, Jeddah and Riyadh, consecutively.

The tour lasted 11 days starting at the Islamic University in Madinah. The title of the presentation was "Network Slicing in 5G". The talk was given in a tutorial style in order to allow the attendees to fully understand why network slicing is needed, and which technologies are involved. This was followed by a presentation of the requirements of 5G as specified by 3GPP, ETSI, NGMN and 5GPPP. Then enabling technologies were introduced: SDN, NFV and cloud computing. For each technology, Prof. Ksentini presented a short history, concepts, challenges and how it can enable 5G. In addition, for each technology, some research results obtained by Prof. Ksentini's team in EURECOM and some research directions are given. The speaker then concluded his presentation by defining network slicing, how it could be achieved in 5G and research directions to be pur-

The attendees were students and academic faculty

Prof. Ksentini delivers one of his lectures.



members (mostly) who were engaged with the state-of-the-art technologies being presented. Subsequently, the Q&A session was very fruitful and many relevant points related to 5G in general, and network slicing, were raised and discussed.

The second visit was to Jeddah for a DLT at King Abdulaziz University. Prof. Ksentini presented "Network Slicing in 5G" for faculty members, researchers and postgraduate students. The audience was interactive and raised many interesting questions about the enabling technologies and the interfaces of those technologies assisting to enable 5G network slicing.

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# Student Career Panel and Blockchain Seminar Sponsored by IEEE Joint ComSoc/VTS Chapter, Victoria, BC, Canada

By Lin Cai, Jianping Pan and Peiyuan Guan, IEEE Joint ComSoc/ VTS Chapter, Victoria, BC, Canada

The IEEE Joint ComSoc/VTS Chapter in the Victoria Section hosted a student career panel titled "What's Beyond the Island?" on the morning of 23 August 2019.

The panel invited seven panelists from the academy, industry, and government research labs: Prof. Fumiyuki Adachi from Tohoku University; Prof. Dingyi Fang from Northwest University; Prof. Rose Hu from Utah State University; Prof. Jianping He from Shanghai Jiaotong University; Prof. Ming Ling from Southeast University; Mr. Matt McKinney from ArcBlock; and Dr. Humphrey Rutagemwa from Communication Research Centre Canada.

The panel brought together approximately 60 attendees for three hours to the Engineering Computer Science Building, on the campus of the University of Victoria, Canada. Immediately after the panel, a two-hour seminar on blockchain was presented in the Engineering Office Wing, which was fully packed as well, attracting about 40 attendees, including students, engineers, and researchers. The back-to-back events were organized by University of Victoria professors, Dr. Jianping Pan and Dr. Lin Cai.

During the student career panel, many students asked questions enthusiastically, such as "What do you hope to be told while you were still in school?"; "What do you hope to be told when you start your career in (academia, government, industry, etc.)?"; "What have you found from your experience, observation and mentoring of students, colleagues, etc.?" Seven panelists shared with the audience their experiences, lessons, and advice. Prof. Fumiyuki Adachi from Tohoku University suggested that students should talk with others to open up to new things and ideas, to achieve things beyond what one can achieve individually. The advice from Prof. Dingyi Fang from Northwest University was to align one's daily objectives with his/her initial dream, i.e., to have a clear long-term vision while focusing on one's current work. Prof. Jianping He from Shanghai Jiaotong University shared his advice on how to deal with



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Dr. Jianping Pan introducing the panelists.

anxiety, such as waiting for offers. He suggested focusing attention on things one can control, instead of worrying about the uncertainty. Prof. Rose Hu from Utah State University encouraged individuals to always believe in one-self and prepare to adapt to a new environment and challenges. Prof. Ming Ling from Southeast University suggested that one should plan a long-term career trajectory at the beginning of their career. Mr. Matt McKinney from ArcBlock encouraged students to step out of their comfort zone. Dr. Humphrey Rutagemwa from Communication Research Centre Canada encouraged students to express themselves bravely.

A pizza lunch was provided after the panel, where participants had the chance to enjoy the pizza, fruits, and beverages while getting together with the panelists for further discussions and socializing

After the student's career panel, Mr. Tian Chen, VP Engineering at ArcBlock, gave a seminar talk on blockchain technologies, from the basic concept to the applications. The talk was entitled "ArcBlock Forge: A Framework to Build Reusable Interconnected Blockchains and Decentralized Apps." ArcBlock is the company developing blockchain systems for building and deploying decentralized applications. The key innovation of ArcBlock is making blockchain interoperability easy with built-in smart contract support, and it is scalable to support a massive number of connected nodes. The talk started from the concept of bitcoin, the most famous crypto-currency. By introducing the operation of bitcoin, Tian illustrated the basic idea about blockchain technologies and the current technical challenges, such as the longest chain, fake trade, etc., followed by the ArcBlock multi-chain framework. The seminar was an excellent opportunity for students to learn from the industry forerunners, and for engineers and researchers to brainstorm on next-generation blockchain platforms.

The audiences showed great enthusiasm about the content, leading to a constructive discussion after the presentation. Matt McKinney, Marketing and Business Development Director at ArcBlock, also answered questions about the operation of blockchain products.

### **SAUDI ARABIA CHAPTER/**Continued from page 2

The third and last talk was at AlFaisal University in Riyadh, and the topic of "Network Slicing in 5G" were also given to mostly faculty members, researchers and industrial professionals. The audience was larger than the previous two DLTs, and because of the hot topic, the audience was interactive and the Q&A session extended the talk beyond the allocated time, primarily because 5G topics are gaining momentum in KSA, and many people are interested in the future of mobile networks. After the presentation, we gathered for a launch with the faculty members.

The IEEE Communication Society Saudi Chapter is striving to serve his members by hosting multiple events and activities that bring members together with the state-of-the-art technologies that are making our world a better place to live in. We regularly invite world class scientists, researchers and industrial professionals for talks and DLTs to serve the interest of our members. For questions or inquiries, please contact the chapter chair, Dr. Abdullah Almuttiri, a.s.a@ieee.org