





The IEEE Montreal Section and Concordia University are inviting all interested IEEE Montreal members and other engineers and students to a technical seminar on:

"Advances and Challenges in 5G Wireless Security"

By: Prof. Yi Qian Dept. of Electrical & Computer Engineering University of Nebraska-Lincoln, USA

DATE: Tuesday May 01, 2018

Seminar Time: 6:00 p.m. – 8:00 p.m.

PLACE: 1515 Ste. Catherine West (corner with Guy St.), Concordia University, Electrical & Computer Engineering Department, Room EV003.309 (with refreshment)

For info, please contact **Dr. Anader Benyamin-Seeyar** at <u>anader.benyamin@ieee.org</u> or <u>http://montreal.ieee.ca/en/com-it/contact</u>.

Abstract :

Wireless communication technologies are ubiquitous nowadays. Most of the smart devices have Cellular, Wi-Fi, Bluetooth connections. These technologies have been developed for many years; nonetheless, they are still being enhanced. More development can be expected in the next 5 years, such as faster transmission data rate, more efficient spectrum usage, lower power consumption, etc. Similarly, cellular networks have been evolved for several generations. For example, GSM as part of 2G family, UMTS as part of the 3G family, and LTE as part of 4G family. In the next few years, 5G cellular network systems will continue the evolution to keep up with the fast-growing needs of customers. Secure wireless communications will certainly be part of other advances in the industry such as multimedia streaming, data storage and sharing in clouds, mobile cloud computing services, etc. This talk covers the topics on security for next generation mobile wireless networks, with focusing on 5G mobile wireless network systems, followed by a discussion on the challenges and open research issues in the area.

Short Bio:

Dr. Yi Qian received a Ph.D. degree in electrical engineering from Clemson University. He is a professor in the Department of Electrical and Computer Engineering, University of Nebraska-Lincoln (UNL). Prior to joining UNL, he worked in the telecommunications industry, academia, and the government. Some of his previous professional positions include serving as a senior member of scientific staff and a technical advisor at Nortel Networks, a senior systems engineer and a technical advisor at several start-up companies, an assistant professor at University of Puerto Rico at Mayaguez, and a senior researcher at National Institute of Standards and Technology. His research interests include information assurance and network security, network design, network modeling, simulation and performance analysis for next generation wireless networks, broadband satellite

networks, optical networks, high-speed networks and the Internet. He has a successful track record to lead research teams and to publish research results in leading scientific journals and conferences. Dr. Yi Qian is a member of ACM and a senior member of IEEE. He is serving on the editorial board for several international journals and magazines, including serving as the Associate Editor-in-Chief for IEEE Wireless Communications Magazine. He is a Distinguished Lecturer for IEEE Vehicular Technology Society and IEEE Communications Society. He is serving as the Technical Program Committee Chair for IEEE International Conference on Communications 2018.