

## **SEMINAR**

## COMPUTER SCIENCE - IT - MECHATRONICS ENGINEERING - MSCS

March 4, 2019, 1:00- 2:00pm

**Broome 2490** 

**Speaker:** Dr. Vida Vakilian

Title: Are You Ready for the Next Generation Wireless Robotics?

**Abstract:** Robots are now becoming an essential part of our daily lives and performing everyday tasks in more intelligent and effective ways. Robots have found application in many domains including industrial automation, health care, surveillance, rescue missions,

and agriculture. In recent years, many robots use wireless technology to communicate with computing resources or other robots. In fact, wireless robotics is one of the

emerging fields in the world of automation. Many robots have equipped with wireless technology such as Bluetooth, Wi-Fi, and Wireless Lan. However, for emerging multi-agent robotic applications, which need ultrareliable low-latency communications (URLLC) such as commercial unmanned aerial vehicles (UAV) and flying taxies, the current wireless technology fails to meet their requirements. In this talk, Dr. Vakilian addresses some of the opportunities, research challenges and standardization issues in wireless robotics with the focus on wireless and networking aspects.

**Bio of the speaker:** Dr. Vida Vakilian is currently an Assistant Professor at

California State University, Bakersfield (CSUB). Prior to her position at CSUB, she held a postdoctoral position at University of California, Riverside where she proposed a novel signal processing algorithm for next generation wireless communication systems operating in millimeter-wave frequency bands. Dr. Vakilian received her Ph.D. in Electrical Engineering from University of Montreal, Canada. While pursuing her Ph.D., she has been working on several research projects in industry and R&D laboratories. Specifically, she was a visiting scholar

at the University of California, Davis, a research scholar at Bell Labs, Alcatel- Lucent and a system engineer at InterDigital Communications Company. Her work has been recognized with a number of distinctions, including the 2016 NSF EARS Award, CSUB Research Excellence Award, Quebec Research Funds on Natural Science and Technology (FQRNT), an international internship award from the Centre de Recherche en Electronique Radiofrquence (CREER), an industrial internship award from the Centre for Advanced Systems and Technologies in Communications (SYTACom) and a German Academic Exchange Service (DAAD)-RISE award from Higher Education, Germany.

Contact: Michael Soltys michael.soltys@csuci.edu