

Prof. Xuemin (Sherman) Shen (University of Waterloo)

Title: Automated Driving and Connected Vehicles

Abstract:

Modern society depends on faster, safer, and environment friendly transportation system. Vehicular communications network in terms of vehicle to vehicle, vehicle to infrastructure, vehicle to pedestrian, vehicle to cloud, and vehicle to sensor, can provide a solution to modern transportation system. In this talk, we first introduce the all connected vehicles. We then present the applications, challenges and scientific research issues of vehicular communications network. We also explain the role of vehicular networking in the automated driving era. We conclude the talk by discuss the future Space-Air-Ground (SAG) Integration.

Biography:

Xuemin (Sherman) Shen is a University Professor and Associate Chair for Graduate Studies, Department of Electrical and Computer Engineering, University of Waterloo, Canada. Dr. Shen's research focuses on wireless resource management, wireless network security, wireless body area networks, smart grid and vehicular ad hoc and sensor networks. He is the Editor-in-Chief of IEEE IoT Journal. He serves as the General Chair for Mobihoc'15, the Technical Program Committee Chair for IEEE GC'16, IEEE Infocom'14, IEEE VTC'10, the Symposia Chair for IEEE ICC'10, the Technical Program Committee Chair for IEEE Globecom'07, the Chair for IEEE Communications Society Technical Committee on Wireless Communications. Dr. Shen was an elected member of IEEE ComSoc BoG, the chair of IEEE ComSoc Distinguish Lecturer selection committee, and a member of IEEE ComSoc Fellow evaluation committee. Dr. Shen received the Excellent Graduate Supervision Award in 2006, and the Premier's Research Excellence Award (PREA) in 2003 from the Province of Ontario, Canada. Dr. Shen is a registered Professional Engineer of Ontario, Canada, an IEEE Fellow, an Engineering Institute of Canada Fellow, a Canadian Academy of Engineering Fellow, a Royal Society of Canada Fellow, and a Distinguished Lecturer of IEEE Vehicular Technology Society and Communications Society.