Dept. of Electrical and Computer Eng.

Colloquium

Automotive Telematics and Networking - Opportunities and Challenges

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With rapid penetration of wireless access and information processing technologies changing the way that vehicle users communicate, significant research efforts have been aimed at improving vehicle safety and on-demand information access. Much recent research has been directed at seamless networking technology to effectively utilize heterogeneous communication media for vehicle users, and ad hoc networking technology for vehicle-to-vehicle and vehicle-with-infrastructure communications. To transition the current technical and experimental results into cost-effective and deployable solutions, considerable R&D and standardization efforts are still required. In this talk, I will start with example vehicle safety networking applications and associated technical challenges. I will then outline some of the current technical approaches and open technical issues, and discuss their potential impacts on vehicle networking.

Brief BIOGRAPHY

Wai Chen received his B.Sc. degree from Zhejiang University, M.Sc., M.Phil., and Ph.D. degrees from Columbia University. He is with the Applied Research at Telcordia Technologies. Currently, he is leading a multiyear research project to develop networking technologies to support vehicle safety and information access. He has also been principal investigator for several government projects, including an ARL-funded network management of mobile ad hoc networks project since 2001.