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SEMINAR

October 20, 2014, from 15:00 to 17:00
Room n. 101, Faculty of Engineering, San Niccolò building

Prof. Rajeev Shorey will provide a seminar entitled:

Challenges in Securing Vehicular Networks

Abstract

Vehicular networks have been the subject of much attention lately. A Vehicular Ad-Hoc Network, or VANET, is a form of mobile ad-hoc network, which provides communications among nearby vehicles and between vehicles and nearby fixed equipment, usually described as roadside equipment. Enabled by short-range to medium-range communication systems (vehicle-to-vehicle or vehicle-to-roadside), the vision of vehicular networks includes real-time and safety applications, sharing the wireless channel with mobile applications from a large, decentralized array of service providers. Vehicular safety applications include collision and other safety warnings. Non-safety applications include real-time traffic congestion and routing information, high-speed tolling, mobile infotainment, and many others. VANETs allow setting up communication links between vehicles for the exchange of information between them. By exchanging information between each other, vehicles can warn drivers to prepare for a dangerous situation, i.e. post-crash notification. Emerging applications in VANETs have opened tremendous business opportunities and navigation benefits, but they also pose challenging research problems in security provisioning. In any Vehicular Ad-hoc Network, there is always a possibility of incorrect messages being transmitted either due to faulty sensors and/or intentional malicious activities. The goal of the talk is to highlight technical challenges and key developments in the area of security in vehicular networks. The talk will primarily cover research & business challenges in the area of vehicular security. The talk will also cover emerging services and applications in the Automotive Space.

Speaker Biography

Rajeev Shorey (Ph.D, Fellow National Academy of Engineering)



Dr. Rajeev Shorey is the Project Director at IT Research Academy, Media Lab Asia, Dept of IT, Government of India. Prior to joining NIIT University as its first President, Dr. Shorey was in General Motors India Science Laboratory (ISL), Bangalore. Prior to joining GM Research, Dr. Shorey was a Research Staff Member at the IBM Research Laboratory, New Delhi from 1998 to 2005. Dr. Shorey's work has resulted in more than 50 publications in international journals and conferences and several US patents, all in the area of wireless and wired networks. He has 12 issued US patents and several pending US patents to his credit. His areas of interest are Wireless Networks, Internet, Telecommunications, Telematics, Data Security and Data Analytics.