NJIT
New Jersey’s Science & Technology Universit

IEEE
COMMUNICATIONS
SOCIETY
North Jersey Chapter

User-Assisted Secure Association of Wireless Devices

by Nitesh Saxena, Polytechnic Institute

Date: October 13, 2008 (Monday)
Time: 6:00 pm (refreshment starts at 5:45 pm)
Place: 202 ECEC, NJIT

About the Speaker

Nitesh Saxena is an Assistant Professor in the Department of Computer and Information Science at Polytechnic Institute of NYU. He works in the areas of computer and network security, and applied cryptography. Nitesh obtained his Ph.D in Information and Computer Science from UC Irvine. He holds an M.S. in Computer Science from UC Santa Barbara, and a Bachelor's degree in Mathematics and Computing from the Indian Institute of Technology, Kharagpur, India. Nitesh's Ph.D. dissertation on "Decentralized Security Services" has been nominated for the ACM Dissertation Award 2006.

About the Talk

Wireless communication (such as over WiFi, Bluetooth channels) is vulnerable to the so-called "Man-In-The-Middle" attacks. A fundamental task, therefore, is to secure this communication. The primary challenge to boostrapping secure communication is that the underlying wireless devices are ad hoc in nature. In other words, neither the devices have any prior context (such as pre-shared secrets) nor do they share a common trusted on- or off-line authority. However, the devices can generally be connected using out-of-band (OOB) physical channels (such as audio, visual) that can be authenticated by the device user(s), and can thus be leveraged for estabilishing secure communication. In this talk, we will discuss some of our contributions (ranging from cryptographic protocols to usability aspects) on using OOB channels to establish secure communication among wireless devices.

Sponsors: **IEEE Communications Society North Jersey Chapter**
NJIT Department of Electrical and Computer Engineering

For more information contact Nirwan Ansari (973)596-3670. Check **http://web.njit.edu/~ieeenj/comm.html** for latest updates. Directions to NJIT can be found at: **http://www.njit.edu/University/Directions.html**.