

**Title:** Large-scale Monitoring and Diagnosis for Wireless Co-Existence

**Speaker:**

Dr. Rong Zheng

Associate Professor

University of Houston

**Date:** Friday, 18 November 2011

**Time:** 11:00 am – 12:00 noon

**Venue:** Room 603, Chow Yei Ching Building

**Abstract:**

Monitoring and diagnosis of wireless networks are becoming a pertinent issue both because of the exponential growth of wireless devices and usage, as well as the increasing vulnerability due to complex interactions at various layers of the protocol stack. Faults, intrusions, anomalies in wireless domain could lead to denial of services of legitimate users and/or endanger the performance of safe critical applications. In this talk, we present our ongoing work on the design of wireless monitoring algorithms and systems with focus on learning and inference schemes for efficient channel allocation of wireless sniffers.

**Biography of the speaker:**

Rong Zheng received her Ph.D. degree from Dept. of Computer Science, University of Illinois at Urbana-Champaign and earned her M.E. and B.E. in Electrical Engineering from Tsinghua University, P.R. China. She is on the faculty of the Department of Computer Science, University of Houston since 2004, currently a tenured associated professor.

Rong Zheng's research interests include network monitoring and diagnosis, cyber physical systems, and sequential learning and decision theory. She received the National Science Foundation CAREER Award in 2006. She serves on the technical program committees of leading networking conferences including INFOCOM, ICDCS, ICNP, etc; and was the program chair for the first ACM workshop on medical grade wireless networks. She served as a guest editor for EURASIP Journal on Advances in

Signal Processing, Special issue on wireless location estimation and tracking,  
Elsevier's Computer Communications – Special Issue on Cyber Physical Systems.

**Organizer:** Prof. V.O.K. Li