

COMPUTER SCIENCE SEMINAR SERIES

Department of Computer Science
City University of Hong Kong
(Departmental Seminar Seminar 2007/2008 - No 12)

Joint Channel Assignment and Real-time Query Scheduling Using Partially Overlapped Channels in Wireless Sensor Networks

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Date :

5 December 2007 (Wednesday)

Time :

3:00pm - 4:00pm

Venue

CS Seminar Room, Rm Y6405, 6th Floor Yellow Zone, Academic Building, City University of Hong Kong, Tat Chee Avenue, Kowloon Tong.

Abstract

Many wireless channels in different technologies are known to be partially overlapped. Due to the interference effects among such partially overlapped channels, their simultaneous use has typically been avoided. Recently, some works illustrate that a careful use of some partially overlapped channels can often lead to significant improvements in spectrum utilization and application performance. Meanwhile, although multi-channel technique has been studied extensively in wireless ad hoc networks and wireless mesh networks, few works try to exploit this technique in wireless sensor networks. In this presentation, we will discuss the feasibility of exploiting partially overlapped channels in wireless sensor networks and why current techniques developed for ad hoc networks and mesh networks are not suitable for sensor networks. At the end, we will discuss our roadmap (draft) to solve this problem.

Supervisor: Prof Xiaohua Jia (CS)

Research Interests: Wireless Mesh Networks and Wireless Sensor Networks

All are welcome!

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In case of questions, please contact Prof Xiaohua Jia at Tel: 2788 9670, E-mail: csjia@cityu.edu.hk, or visit the CS Departmental Seminar Web at <http://www.cs.cityu.edu.hk/>.