

COMPUTER SCIENCE SEMINAR SERIES

Department of Computer Science
City University of Hong Kong
(Departmental Seminar Seminar 2006/2007 - No 56)

Joint radio assignment and channel allocation in Wireless Mesh Networks

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Date :

7 May 2007 (Monday)

Time :

6:20pm-7:00pm

Venue :

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

Abstract

In centralized scheduling for IEEE 802.16 mesh networks, all packets should be transported through the MBS (Mesh Base Station). The links to or from the MBS become the system's bottleneck and the throughput is heavily impacted by the interference. To solve this problem, multiple radios are equipped in some stations to increase the bandwidth of these links. This presentation proposes an efficient scheduling algorithm for IEEE 802.16 mesh mode. It is a centralized scheduling algorithm that considers the usage of multiple radios. Extensive simulation results obtained from different configurations are presented to compare with other related work which shows that our algorithm is correct and efficient.

Supervisor: Dr. Weijia Jia (CS)
Research Interests: Wimax, Wireless mesh network.

All are welcome!

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In case of questions, please contact Dr Weijia Jia at Tel: 2788 9701, E-mail: itjia@cityu.edu.hk, or visit the CS Departmental Seminar Web at <http://www.cs.cityu.edu.hk/>.