

# COMPUTER SCIENCE SEMINAR SERIES

Department of Computer Science  
City University of Hong Kong  
(Departmental Seminar Seminar 2007/2008 - No 10)

## Analysis of Data Scheduling Algorithms for Multi-item Request in Multi-channel On-demand Broadcast Environment

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**Date :**

23 November 2007 (Friday)

**Time :**

2:00pm - 3:00pm

**Venue**

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

### Abstract

Data broadcasting has received much attention in prior research. Significant scheduling schemes have been proposed and studied in various broadcast environments. Among them, on-demand broadcast is a promising data dissemination method for mobile and wireless computing applications. Moreover, a large number of applications concern with requests that return multiple data items. It leads an increasing need for broadcast systems to support efficient processing of multi-item requests. Meanwhile, multi-channel broadcast is also necessary due to either some physical constraints or application-oriented requirements. Based on the observations above, this work will generally focus on analyzing on-line scheduling algorithms in supporting multi-item requests in a multi-channel on-demand broadcast environment. Three of the existing algorithms are modeled in the proposed environment. The experiment results demonstrate that most previous algorithms cannot achieve expected performance in this new setting and it is imperative to develop new solutions for the specific environment.

Supervisor: Dr Victor Lee (CS)

Research Interests: Data Scheduling in Mobile Computing Systems; Modeling and Performance Evaluation

**All are welcome!**

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*In case of questions, please contact Dr Victor Lee at Tel: 2788 8617, E-mail: [csvlee@cityu.edu.hk](mailto:csvlee@cityu.edu.hk), or visit the CS Departmental Seminar Web at <http://www.cs.cityu.edu.hk/>.*