Department of Electronic Engineering
Presents a Postgraduate Research Seminar Series

Session I: Graduation Seminar

Performance Evaluation of Long Range Dependent Queues

By

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Supervisor: Prof Moshe Zukerman

Date : 24 January 2014 (Friday)
Time : 2:00pm – 2:30pm
Venue : Lecture Theatre 3, 4/Floor, Academic 1, City University of Hong Kong

Abstract
Analysis of measured traffic streams taken from a wide range of sources has shown that traffic streams exhibit Long Range Dependent (LRD) and self-similar characteristics in VBR video, Ethernet traffic, metropolitan area traffic, general Internet traffic, and between on-chip modules in typical MPEG-2 video applications. Therefore, a queue fed by LRD input has been considered a fundamentally important model for Internet queueing performance analysis and capacity assignment, and has attracted significant attention. In this presentation, we introduce the basics of LRD queues, present how to fit the LRD traffic model to real traffic streams, show the analytical results for performances of the queues fed by two important LRD inputs, Poisson Pareto/Lomax Burst Process (PPBP/PLBP) and fractional Brownian motion (fBm).

Brief Biography
Mr Chen received the B.Eng. degree in Information Engineering with First Class Honours from the City University of Hong Kong, Hong Kong SAR, China, in 2010. He is currently working towards his Ph.D. degree in electrical engineering at the same university. His current research is in the area of performance evaluation of long range dependent queues.

** All are welcome **