THE CHINESE UNIVERSITY OF HONG KONG
Department of Information Engineering

Seminar

Delay Tolerant Networking and Mobility

by

Dr. Pan Hui
Senior Research Scientist
Deutsche Telekom Laboratories
Berlin

Date : **18 December, 2009 (Friday)**
Time : **2:30-3:30pm**
Venue : **Room 833, Ho Sin Hang Engineering Building**
The Chinese University of Hong Kong

Abstract
Delay Tolerant Networking (DTN) has attracted a lot of attention from the research community in recent years. Much work has been done regarding network architectures and algorithms for routing and forwarding in such networks. At the same time as many show enthusiasm for this exciting new research area there are also many sceptics, who question the usefulness of research in this area. In the past, we have seen other research areas become over-hyped and later die out as there was no killer app for them that made them useful in real scenarios. Real deployments of DTN systems have so far mostly been limited to a few niche scenarios, where they have been done as proof-of-concept field tests in research projects. In the first half part of the talk, we embark upon a quest to find out what characterizes a potential killer application for DTNs. Are there applications and situations where DTNs provide services that could not be achieved otherwise, or have potential to do it in a better way than other techniques? In the second half of the talk, we highlight some of the main challenges that need to be solved to realize these applications and make DTNs a part of the mainstream network landscape. A special focus will be put on discussing the issues regarding planet-scale mobility measurements, which is a research project we are pursuing with several top institutes in Europe.

Biography
Dr. Pan Hui is a senior research scientist in Deutsche Telekom Laboratories based in Berlin. He holds a PhD in computer science from Computer Laboratory, University of Cambridge. During his PhD, he also affiliated with Intel Research Cambridge, and Thomson Research Laboratory in Paris. Before that he was with University of Hong Kong for his Mphil and bachelor degree. His research interests include delay tolerant networking, mobile networking and systems, planet-scale mobility measurement, social networks, and the application of complex network science in communication system design. He has published many papers about DTN including some very well cited works in the area of mobility measurement. Pan has co-founded three workshops on areas related to DTN, including ACM HotPlanet, SIMPLEX and Extremcom. Extremecom provides an unique experience for researchers to go to the real rurual environment, deploy and test real DTN systems. He also has served on the program committee of several conferences and workshops, including Infocom, and Globecom.

** ALL ARE WELCOME **

Host: Professor Wing C. Lau (Tel: 2609-8356, Email: wclau@ie.cuhk.edu.hk)
Enquiries: Information Engineering Dept., CUHK (Tel.: 2609-8385)