

**Title:** Social Engineering Approach to Computer Systems Design

**Speaker:**

Dr. Pan HUI

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**Date:** Thursday, 5 January 2012

**Time:** 11:00 am – 12:00 noon

**Venue:** Room 603, Chow Yei Ching Building

**Abstract:**

Many computer networks have dual properties. They are physical networks and at the same time human networks. It is tremendously important to exploit this social networking feature to design more efficient and more reliable communication systems. In this talk, I will illustrate, with several examples, how social networks can be integrated into system design. I will start by introducing several human mobility experiments with diversified scenarios and presenting two important social metrics, community and centrality, commonly observed in the experiments. Next, I will talk about how these social metrics can be applied to forwarding in opportunistic networks, mobile data offloading for cellular networks, scaling up of microblogging services, and design of spam protection systems.

**Biography of the speaker:**

Dr. Pan HUI is a senior technical staff member in Deutsche Telekom Laboratories (T-labs), Berlin Germany. He is currently leading the corporate R &D SkyRider Project on mobile cloud computing and intelligent infrastructure. He received his PhD from Computer Laboratory, University of Cambridge. During his PhD, he was also an affiliated researcher with Intel Research Cambridge. His Mphil and bachelor degrees were both from University of Hong Kong. His current research interests include social networking and computing, cloud computing, mobile networking and systems, and the application of complex network science in communication systems design. Dr. Hui has published more than 80 international papers and book chapters,

and have accumulative more than 2,500 citations. He has founded 3 and have chaired 9 IEEE/ACM conferences/workshops, and served on the technical program committee of 32 international conferences and workshops including IEEE Infocom, SECON, MASS and Globecom. More information about his profile and his research work can be found at <http://www.deutsche-telekom-laboratoriesde/~panhui/>

**Organizer:** Prof. V.O.K. Li