



THE CHINESE UNIVERSITY OF HONG KONG
Department of Information Engineering

Seminar

**Social Engineering Approach to
Internet Services and Applications**

by

Dr. Pan Hui

Telekom Innovation Laboratories (T-labs), Germany

Date : 16 April, 2012 (Mon.)
Time : 11:00am-12:00noon
Venue : Room 833, Ho Sin Hang Engineering Building
The Chinese University of Hong Kong

Abstract

The recent development in computer network has enabled a rich set of Internet services and applications such as email, online social networks (OSNs), and microblogging systems that are now a very important part of our daily lives. 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 and social contact 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 mobile networks, design of spam protection systems, scaling up of microblogging services, mobile data offloading for cellular networks, cyber-insurance, and recommendation systems.

Biography

Dr. Pan Hui is a senior research scientist and principal investigator in Telekom Innovation Laboratories (T-labs) Germany, and an adjunct Professor of social computing and networking in Aalto University (Helsinki University of Technology) Finland. 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 and Internet services, mobile and pervasive systems, planet-scale sensing and smarter cities, and the application of complex network science in communication systems design. Dr. Hui has published more than 80 international papers and book chapters, and has accumulated around 3,000 citations. He has founded and chaired several IEEE/ACM conferences/workshops, and served on the technical program committee of numerous international conferences and workshops including IEEE Infocom, SECON, MASS and Globecom. He also has 8 granted and pending European patents. More information about his profile and his research work can be found at <http://www.deutsche-telekom-laboratories.de/~panhui/>

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