THE CHINESE UNIVERSITY OF HONG KONG
Department of Information Engineering

Seminar

Triadic Closure Analysis and Prediction in Online Social Networks
by
Professor Xiaoming Fu
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Germany

Date : **2 December, 2015 (Wednesday)**
Time : **2:00pm - 3:00pm**
Venue : **Room 1009, William M.W. Mong Engineering Building**
The Chinese University of Hong Kong

Abstract
A closed triad is a group of three people who are connected with each other. It is the most basic unit for studying group phenomena in social networks. In this work, we study how closed triads are formed in dynamic networks. More specifically, given three persons, what are the fundamental factors that trigger the formation of triadic closure? There are various factors that may influence the formation of a relationship between persons. Can we design a unified model to predict the formation of triadic closure? Employing a large microblogging network as the source in our study, we study how user demographics and network topology influence the process of triadic closure. We also present a probabilistic graphical model to predict whether three persons will form a closed triad in dynamic networks. The experimental results on the microblogging data demonstrate the efficiency of our proposed model for the prediction of triadic closure formation.

Biography
Prof. Xiaoming Fu received his Ph.D. in computer science from Tsinghua University, Beijing, China in 2000. He was then a research staff at the Technical University Berlin until joining the University of Goettingen, Germany in 2002 as assistant professor, where he has been a professor in computer science and heading the Computer Networks Group since April 2007. He has spent research visits at universities of Cambridge, Columbia, UCLA, Tsinghua, Nanjing, Fudan, Uppsala, and UPMC. Prof. Fu's research interests include network architectures, protocols, and applications including data analytics. He is currently an editorial board member of IEEE Communications Magazine, IEEE Transactions on Network and Service Management, Elsevier Computer Networks, and Computer Communications, and has served on the organization or program committees of leading conferences such as INFOCOM, ICNP, ICDCS, MOBICOM, MOBIHOC, CoNEXT, ANCS, and COSN. He has served as secretary (2008-2010) and vice chair (2010-2012) of the IEEE Communications Society Technical Committee on Computer Communications (TCCC), and chair (2011-2013) of the Internet Technical Committee (ITC) of the IEEE Communications Society and the Internet Society. He has been involved in FP6 ENABLE, VIDIOS, Daidalos-II and MING-T projects and is the coordinator of FP7 GreenICN, MobileCloud and CleanSky projects.

** ALL ARE WELCOME **

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