

Department of Computer Science and Engineering

Presents

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People Analytics in Social Networks: Technologies & Applications

People rely on a personal network of friends and colleagues to get trusted information; help filter and interpret information; and get referrals to other people. Moreover, to build such networks, people may leverage multiple means of interaction, such as email, face-to-face meetings, friending activities, and etc. These multi- faceted signals about people give ample opportunities to understand their behavior. In practice, finding the hidden connections in any organization helps people to work together and share social resources to achieve common goals. SmallBlue, is an info-social sensing, analysis and visualization system designed to unlock this valuable collective intelligence without explicit human involvement. It has been deployed within IBM in over 70 countries for four years, and inferred the social networks of 400,000 employees. It has successfully fostered collaborations in employees' social networks, and it is currently being extended to apply social network analysis in cyber-security and smarter commerce.

This talk introduces the recent developments of SmallBlue system. First, I describe the design of SmallBlue and how it is being used to help information workers to find experts and manage their social capital. Next, I discuss SmallBlue's scientific advances. In particular, we study how information spread in organizational social networks. We have also studied how well a person's attributes can be inferred from social neighbors in networks, and how people's interactions are influenced by culture.

Bio: Dr. Zhen Wen is currently a research staff member at IBM T. J. Watson Research Center. He received his PhD from University of Illinois at Urbana-Champaign in Computer Science in 2004. He is a co-PI of the Social Network Analytics Research in IBM T. J. Watson Research Center. He is leading both basic and applied research efforts on modeling human behavior in social networks, which is sponsored by various funding agencies including Army Research Lab Social and Cognitive Networks Academic Research Center. The research has also led to successful IBM product such as IBM Atlas. His past research at IBM includes context-sensitive visualization for visual analytics. Specifically, he has worked on generating visualization that is appropriate for user analytic tasks using contextual cues. His work has been used in a Department of Homeland Security project on monitoring and analyzing shipment through US Customs, as well as in a project on business intelligence (e.g., IBM Cognos). Zhen Wen has broad interests in data mining, signal processing and human computer interaction with applications on social network analysis and multimedia analysis. He has been serving as organizing committee member, technical committee member at various IEEE/ACM conferences. He is an area chair of social media at ACM conference on Multimedia 2012. His work received 2011 Association of Information System ICIS Best Theme Paper Award, the best paper award at ACM Conference on Intelligent User Interfaces (IUI) 2005, an IBM Research division award in 2005, and an IBM invention achievement award in 2007, 2010 and 2011. Dr. Wen is a senior member of IEEE.

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University at Buffalo – North Campus – Davis 113A

Refreshments for attendees after the talk. This talk is free and open to the public

For more information, please email <u>cse-dept@cse.buffalo.edu</u> or contact (716) 645-3180