Supporting Civic Activities with Machine and Human Computation

Presented by

Patrick C. Shih
Pennsylvania State University

Abstract:
Data science is an interdisciplinary field that involves generating insight from big datasets and creating visualizations to aid the interpretation of data. In my research, I leverage individual and community activities embedded in social media and online forums to design novel civic engagement platforms. I use a mixed methods approach to analyze large datasets and identify opportunities and challenges that hinder adoption and use. I then create functional prototypes to validate my designs through controlled experiments and in-situ deployments. In my talk, I will describe two research projects--Community Poll and Mobile Timebanking--that involve an end-to-end design approach to enhance community identity and awareness as well as facilitate reciprocity and social capital building in local communities. I discuss implications and challenges in community informatics research and offer insights on how research in this area can be improved by leveraging end-user configuration and human computation.

Bio:
Dr. Patrick C. Shih received the B.S. degree in Computer Science and Engineering from the University of California, Los Angeles, in 2003, the M.S. degree in Information Networking from Carnegie Mellon University in 2005, and the Ph.D. degree in Information and Computer Science from the University of California, Irvine in 2011. In 2012, he joined the College of Information Sciences and Technology at The Pennsylvania State University as a Research Associate and Lecturer (Graduate Faculty). Dr. Shih publishes in the areas of HCI and CSCW. His current research interests include community informatics, healthcare informatics, virtual communities, and educational technologies. Dr. Shih is a member of IEEE and ACM.