

Studying Human Behavior via a Social Media Lens

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The prevalence of social media offers a new kind of laboratory for behavioral study. A natural confluence of social and computer sciences emerges in the era of the social Web. We are presented with unparalleled opportunities and novel challenges. Benefiting from extant sociological theories and methodologies and through the social media lens, we endeavor to research scalable computational approaches that enable the study of online human behavior. We inquire whether one can find the influentials in an online community; disentangle the complicated connections among users to find their intrinsic group memberships; assess user vulnerability on a social networking site; look into user migration patterns in the presence of seemingly unlimited choices of social media services; and question the comparability between what we learn about social behavior in social media and what we can expect in the physical world. As social media expands our communication capabilities, our research and improved understanding of human behavior will enable the discovery of new social and behavioral patterns otherwise not possible.

Related Publications

- Jiliang Tang, Huiji Gao, and Huan Liu. "mTrust: Discerning Multi-Faceted Trust in a Connected World", the 5th ACM International Conference on Web Search and Data Mining (WSDM 2012), February 8-12, 2012. Seattle, Washington.
- Pritam Gundecha, Geoffrey Barbier, and Huan Liu. "Exploiting Vulnerability to Secure User Privacy on a Social Networking Site", the 17th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2011), August 21-24, 2011, San Diego, CA.
- Shamanth Kumar, Reza Zafarani, and Huan Liu. "Understanding User Migration Patterns in Social Media ", the special track on AI and the Web (AIW) at the Twenty-Fifth AAAI Conference on Artificial Intelligence (AAAI-11). August 7 - 11, 2011, in San Francisco, CA.
- L. Tang and H. Liu. "Toward Collective Behavior Prediction via Social Dimension Extraction". IEEE Intelligent Systems, July/August 2010, 25:4(19-25).
- L. Tang and H. Liu. "Relational Learning via Latent Social Dimension", The 15th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD'09), Paris, France, August 2009.
- N. Agarwal, H. Liu, L. Tang, and P. Yu. "Identifying Influential Bloggers in a Community", First International Conference on Web Search and Data Mining (WSDM08), pp 207-218, February 11-12. Stanford, California.
- Lei Tang and Huan Liu. "[Community Detection and Mining in Social Media](#)", Morgan & Claypool Publishers, September 2010.

- Nitin Agarwal and Huan Liu. "[Modeling and Data Mining in Blogosphere](#)", Morgan & Claypool Publishers, July 2009.

Short Bio Sketch

Dr. Huan Liu is a professor of Computer Science and Engineering at Arizona State University. He obtained his Ph.D. in Computer Science at University of Southern California and B.Eng. in Computer Science and Electrical Engineering at Shanghai JiaoTong University. Before he joined ASU, he worked at Telecom Australia Research Labs and was on the faculty at National University of Singapore. He was recognized for excellence in teaching and research in Computer Science and Engineering at Arizona State University. His research interests are in data mining, machine learning, social computing, and artificial intelligence, investigating problems that arise in many real-world, data-intensive applications with high-dimensional data of disparate forms such as social media. His well-cited publications include books, book chapters, encyclopedia entries as well as conference and journal papers. He serves on journal editorial boards and numerous conference program committees, and is a founding organizer of the International Conference Series on Social Computing, Behavioral-Cultural Modeling, and Prediction (<http://sbp.asu.edu/>). He is an IEEE Fellow and an ACM Distinguished Scientist. Updated information can be found at <http://www.publi.asu.edu/~huanliu>.