THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY
Department of Information Systems, Business Statistics and Operations Management
IS SEMINAR ANNOUNCEMENT

Social Influence and the Co-Diffusion of Information and Behaviors — A Study of Prosocial Activity Diffusions on Online Social Networks

by

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DATE	21 February 2025 (Friday)
TIME	10:30 am - 12:00 noon
VENUE	4/F Meeting Room (Room 4047), LSK Business Building

ABSTRACT

Online social networks (OSNs) are powerful tools in enabling the dissemination of information and promoting offline participations. Communication features on OSNs further enhance prompt information diffusion to a broad audience especially in matters related to prosocial activities. However, attaining behavior diffusion through information sharing on social media platforms demands additional efforts. Integrating machine learning, social network analyses, survival analysis, and diffusion theory, this research first identifies information and behavior adoptions related to the Ice Bucket Challenge on Twitter, and then examines the concurrent diffusion of information and behaviors. When examining the two diffusion processes separately, our empirical results reveal that both unilateral and bilateral social connections significantly influence users' information and behavior adoptions. Furthermore, we employ a copula-based joint survival model to examine the co-diffusion of information and behavior adoptions; empirical results show a significant interdependency exists between the two diffusion processes. By incorporating the Bass diffusion model into survival analysis and introducing the joint survival model, this study provides new tools to study the timing of events in various settings. The empirical findings extend our understanding of how different social influences drive users' decisions in the dissemination of information online or taking concrete offline actions. Such knowledge could be utilized by organizations to identify and engage influential OSN users, predict information and behavior adoptions, and improve the efficiency of online promotions or social campaigns.

BIOGRAPHY

Dr. Zhengrui (Jeffrey) Jiang is a Professor of Information Systems at the School of Management and Economics, The Chinese University of Hong Kong, Shenzhen. Before joining CUHK-Shenzhen, he was the Thome Professor in Business and Professor of Information Systems and Business Analytics at the Ivy College of Business, Iowa State University and a Distinguished Professor at Nanjing University Business School. Dr. Jiang's primary research interests include business intelligence and analytics, optimization/decision-making under uncertainty, diffusion of technological innovations, and economics of information technology. His research has appeared in premier academic journals including Management Science, MIS Quarterly, Information Systems Research, and IEEE Transactions on Knowledge and Data Engineering. Dr. Jiang currently serves as an associate editor for Information Systems Research and won the journal's Best Associate Editor Award in 2021. He previously served as an associate editor for MIS Quarterly and received its Outstanding Associate Editor Award in 2016. In addition, he is currently a senior editor for Production and Operations Management. He co-chaired The 13th Annual Big XII+ MIS Research Symposium (2015), The 9th Annual Midwest Association for Information Systems Conference (2014), and The 28th Workshop on Information Technologies and Systems (WITS 2018). Besides academia, Dr. Jiang has collaborated extensively with industry partners in the past ten years. He has done analytics work for multiple internationally known companies in America, Europe, and China, and provided them solutions to improve the efficiency of operations.