## Overview of Influence Maximization in Social Media Data Analytics

Jianxin Li University of Western Australia Perth, Australia Jianxin.li@uwa.edu.au

## ABSTRACT

Social media has become a new and main platform for organizations to broadcast their policies, for companies to advertise their products, and for people to propagate their opinions. Therefore, social media data analytics has become a timely and significant research topic in recent years. In this talk, Dr. Li will first go through the social media background and the data representation of social media data. And then, he will briefly discuss the main stream research in social data mining and social computing. After that, Dr. Li will mainly introduce how the two most popular influence models are defined in social computing, what the influence maximization problem is defined, how its variants are defined. Particularly, in this talk, Dr. Li will focus more on the traditional influence maximization, topic-awareness influence maximization, time-constrained influence maximization, location-awareness influence maximization, target-awareness influence maximization, and the community-level influence maximization. Finally, Dr. Li will introduce his current social media research project and discuss the interesting collaboration with attendees.

This one-hour keynote targets researchers, designers and practitioners interested in social computing, social media data analytics, big data management systems and processing. While the audience with a good background in these areas would benefit most from this keynote, we believe the material to be presented would give general audience and newcomers an introductory pointer to the current work and important research topics in this field of viral marketing and social influence maximization, and inspire them to learn more. Only preliminary knowledge about graph, data mining, algorithms and their applications are needed.

Keywords: Social computing; social media; social influence.

## **Keynote Speaker's Bio:**

Jianxin Li is currently working as a Senior Lecturer in the School of Computer Science & Software Engineering, the University of Western Australia. He obtained his PhD degree by Swinburne University of Technology in 2009. After that, he worked as a Research Fellow in Swinburne in 2009-2014 and as a Lecturer/Early Career Development Fellow in RMIT in 2015. Jianxin's research interests include social computing, graph database management system, query processing and optimization, big data processing, and transport data analytics. His social computing research has been granted one ARC Discovery Project in 2016. He is an active researcher in database and data mining communities. He has published 37 high quality research papers in top international conferences and journals including IEEE ICDE 2011, 2014, 2016, 2017, ICDM 2016, EDBT 2010, 2012, CIKM 2016, IEEE TKDE 2014, 2015, 2016. Jianxin is active in PC member, reviewer and co-organizer in many conferences such as SIGMOD 2017, PVLDB 2015, ACSW 2017, and ADC 2015; and was co-local Chair/publicity Chair/proceeding Chair of ADC 2015; Proceeding Chair of ADMA 2016; and is a co-Tutorial Chair of WWW 2017. His homepage is at http://www.web.uwa.edu.au/person/jianxin.li.

**ACKNOWLEDGMENTS:** This work is supported by the ARC Discovery Project under grant No. DP160102114.

© 2017 International World Wide Web Conference Committee (IW3C2), published under Creative Commons CC BY 4.0 License. WWW 2017 Companion, April 3-7, 2017, Perth, Australia. ACM 978-1-4503-4914-7/17/04. http://dx.doi.org/10.1145/3041021.3053049

