

Social Computing, Big Data, and AI-Related Publications

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Publications in Peer-Reviewed Journals:

1. Gong, Q., Y. Chen, X. He, Y. Xiao, P. Hui, X. Wang, and X. Fu, "Cross-Site Prediction on Social Influence for Cold-Start Users in Online Social Networks", *ACM Transactions on the Web* (in press), DOI: 10.1145/3409108
2. Hong Huang, Wei Zhou, Huaqian Sheng, Dongxiao Yu, Hai Jin, Core Decomposition and Maintenance in Weighted Graph, *World Wide Web* (Springer), early access, DOI: 10.1007/s11280-020-00857-0
3. Shichang Ding, Xin Gao, Yufan Dong, Xiaoming Fu, Estimating Multiple Socioeconomic Attributes via Home location – A Case Study in China, *Journal of Social Computing*, 1(2), IEEE, January 2021.
4. Yali Yuan, Robert Tasik, Sripriya Srikant Adhatarao, Yachao Yuan, Zheli Liu, Xiaoming Fu, RACE: Reinforced Cooperative Autonomous Vehicle Collision Avoidance. *IEEE Transactions on Vehicular Technology* 69(9): 9279-9291, Sept 2020
5. Xin Gao, Jar-Der Luo, Kunhao Yang, Xiaoming Fu, Loring Liu, Weiwei Gu, Predicting Tie Strength of Chinese Guanxi by Using Big Data of Social Networks, *Journal of Social Computing*, IEEE, 1: 40-52, Sept 2020.
6. Tao Zhao, Hong Huang, Xiaoming Yao, Jar-der Luo, Xiaoming Fu, Predicting individual socioeconomic status from mobile phone data: a semi-supervised hypergraph-based factor graph approach, *International Journal of Data Science and Analytics* (Springer). Vol. 9, pp. 361-372, Apr 2020.
7. Wang, X., C. Wang, X. Chen, X. Fu, X. Wang, and J. Han, "Measurement and Analysis on Large-Scale Offline Mobile App Dissemination over Device-to-Device Sharing in Mobile Social Networks", *World Wide Web* (Springer), 23: 2363–2389, Mar 2020
8. Shuai Xu, Xiaoming Fu, Jiuxin Cao, Bo Liu, Zhixiao Wang, Survey on User Location Prediction Based on Geo-Social Networking Data, *World Wide Web Journal* (Springer), vol. 23, pp. 1621–1664, Jan 2020.
9. Jar-Der Luo, Jifan Liu, Kunhao Yang, Xiaoming Fu, Big data research guided by sociological theory: a triadic dialogue among big data analysis, theory, and predictive models, *The Journal of Chinese Sociology* 6 (1), 11, <https://link.springer.com/article/10.1186/s40711-019-0102-4>, Dec 2019
10. Hong Huang, Yuxiao Dong, Jie Tang, Hongxia Yang, Nitesh V. Chawla, Xiaoming Fu, Will Triadic Closure Strengthen Ties in Social Networks? *ACM Transactions on Knowledge Discovery from Data*, 12(3), Article No. 30, Jan. 2018.
11. David Koll, Jun Li, Xiaoming Fu, The Good Left Undone: Advances and Challenges in Decentralizing Online Social Networks, *Computer Communications*, 108(1): 36-51, Elsevier, Aug. 2017.
12. Farshid H. Bijarbooneh, Wei Du, Edith Ngai, Xiaoming Fu, Jiangchuan Liu, Cloud-Assisted Data Fusion and Sensor Selection for Internet-of-Things, *IEEE Internet of Things Journal*, 3(3): 257-268, June 2016.

13. Bolei Zhang, Zhuzhong Qian, Wenzhong Li, Bin Tang, Sanglu Lu, Xiaoming Fu, Budget Allocation for Maximizing Viral Advertising in Social Networks, *Journal of Computer Science and Technology*, 31(4): 759-775, Springer, April 2016.
14. Lei Jiao, Jun Li, Tianyin Xu, Wei Du, Xiaoming Fu, Optimizing Cost for Online Social Networks on Geo-Distributed Clouds. *IEEE/ACM Transactions on Networking*, 24(1): 99-112, Jan 2016
15. Hong Huang, Jie Tang, Lu Liu, Jarder Luo, Xiaoming Fu, Triadic Closure Pattern Analysis and Prediction in Social Networks, *IEEE Transactions on Knowledge and Data Engineering*, 27(12): 3374-3389, Dec 2015.
16. Konglin Zhu, Wenzhong Li, Xiaoming Fu, Lin Zhang, Data routing strategies in opportunistic mobile social networks: Taxonomy and open challenges, *Computer Networks*, 93 (part I): 183-198, Elsevier, Dec 2015.
17. Wei Du, Yongjun Liao, Narisu Tao, Pierre Geurts, Xiaoming Fu, Guy Leduc, Rating Network Paths for Locality-Aware Overlay Construction and Routing, *IEEE/ACM Transactions on Networking*, 23(5): 1661-1673, Oct. 2015.
18. Konglin Zhu, Wenzhong Li, Xiaoming Fu, Rethinking Routing Information in Mobile Social Networks: Location-based or Social-based?, *Computer Communications*, 42: 24-37, Elsevier, April 2014.
19. Konglin Zhu, Wenzhong Li, Xiaoming Fu, Modeling population growth in online social networks, *Complex Adaptive Systems Modeling*, 1:14, doi:10.1186/2194-3206-1-14, Springer Verlag, June 2013.
20. Sufian Hameed, Xiaoming Fu, Pan Hui and Nishanth Satry, Fighting Spam Using Social GateKeepers, *Networking Science*, 2(1-2): 28-41, Springer Verlag, May 2013.

Publications in Peer-Reviewed Conferences and Workshops:

1. Jiaying Kou, Jiahua Du, Xiaoming Fu, Geordie Zhang, Hua Wang and Yanchun Zhang, "The Effect of Regional Economic Clusters on Housing Price", 32nd Australasian Database Conference (ADC 2021), Feb. 2021.
2. Weijun Wang, Tingting Yuan, Minghao Han, Han Zhang, Yu Ma, Meng Li, Sripriya S. Adhatarao and Xiaoming Fu, A Real-time Social Distance Measurement and Record System for COVID-19, poster session, 18th ACM International Conference on Embedded Wireless Systems and Networks (EWSN 2021), Feb 2021
3. Jiaquan Zhang, Xiaoming Yao, and Xiaoming Fu, "Identifying unfamiliar callers' professions from privacy-preserving mobile phone data", 16th IEEE International Conference on Mobility, Sensing and Networking (MSN 2020), Dec 2020.
4. Yachao Shao, Tao Zhao, X. Wang, Xiaofeng Zou, and Xiaoming Fu, "Multiple Balance Subsets Stacking for Imbalanced Healthcare Dataset", 26th IEEE International Conference on Parallel and Distributed Systems (ICPADS 2020), Dec 2020.
5. Yali Yuan, Sripriya Srikant Adhatarao, Mingkai Lin, Yachao Yuan, Zheli Liu, Xiaoming Fu, ADA: Adaptive Deep Log Anomaly Detector, *IEEE INFOCOM 2020*, July 2020
6. Shichang Ding, Hong Huang, Tao Zhao, Xiaoming Fu, Estimating Socioeconomic Status via Temporal-Spatial Mobility Analysis - A Case Study of Smart Card Data, *IEEE ICCCN 2019*, Valencia, Spain, July 2019.
7. Chenxi Yang, Yang Chen, Qingyuan Gong, Xinlei He, Yu Xiao, Yuhuan Huang, Xiaoming Fu, Understanding the Behavioral Differences Between American and German Users: A

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8. Qingyuan Gong, Yang Chen, Xinlei He, Zhou Zhuang, Tianyi Wang, Hong Huang, Xin Wang and Xiaoming Fu, DeepScan: Exploiting Deep Learning for Malicious Account Detection in Location-Based Social Networks, *IEEE Communications Magazine*, Feature Topic on Mobile Big Data for Urban Analytics, 56(11): 21-27, Nov 2018.
 9. Jar-Der Luo, Jifan Liu, Kunhao Yang, Xiaoming Fu, On Big Data Research Guided by Social Theory—The Three-way Interplay of Social Theory, *Data Mining and Predictive Models. Sociological Studies*, 2018.5: 117-138, Oct. 2018 (in Chinese)
 10. Qingyuan Gong, Xinlei He, Qinge Xie, Shihan Lin, Guozhen She, Ruiyu Fang, Rui Han, Yang Chen, Yu Xiao, Xiaoming Fu, Xin Wang, LBSLab: A User Data Collection System in Mobile Environments. *UbiComp'18 – Proceedings of the 2018 ACM International Joint Conference and 2018 International Symposium on Pervasive and Ubiquitous Computing and Wearable Computers 2018 (UbiComp/ISWC'18 Adjunct)*, pages 624-629, Oct 2018.
 11. Jiaying Kou, Xiaoming Fu, Jiahua Du, Hua Wang, and Geordie Zhang, Detecting Housing Market Behaviour from a Microscopic Perspective, *IEEE 27th International Conference on Computer Communications and Networks (ICCCN 2018)*, Hangzhou, China, July-August 2018.
 12. Bo Zhao, Hong Huang, Jar-Der Luo, Xinggong Wang, Xiaoming Yao, Ramin Yahyapour, Zhenxuan Wang, Xiaoming Fu, A Preliminary Study of E-commerce User Behavior Based on Mobile Big Data, *IEEE 87th Vehicular Technology Conference (VTC 2018-Spring)*, Porto, Portugal, June 2018.
 13. Qian Zhou, Yang Chen, Chuanhao Ma, Fei Li, Yu Xiao, Xin Wang and Xiaoming Fu, Measurement and Analysis of the Reviews in Airbnb, *IFIP Networking 2018*, Zurich, Switzerland, IEEE Press, May 2018.
 14. Tao Zhao, Hong Huang, Xiaoming Fu, Identifying Topical Opinion Leaders in Social Community Question Answering, *23rd International Conference on Database Systems for Advanced Applications (DASFAA 2018)*, Gold Coast, Australia, May 2018.
 15. Hong Huang, Bo Zhao, Hao Zhao, Zhou Zhuang, Zhenxuan Wang, Xiaoming Yao, Xinggong Wang, Hai Jin and Xiaoming Fu, A Cross-Platform Consumer Behavior Analysis of Large-Scale Mobile Shopping Data, *The Web Conference (WWW 2018)*, Industry Track, Lyon, France, ACM, April 2018.
 16. Xiaoming Fu, Hong Huang, Xiang-Yang Li, Haisheng Tan, Jie Tang, A Comparative Analysis of School Pupils' Daily Habits in Germany and China. *IEEE INFOCOM 2018 Workshop on Hot Topics in Planet-Scale Mobile Computing and Online Social Networking (HotPOST'18)*, Honolulu, HI, USA, April 2018.
 17. Hao Zhao, Qingyuan Gong, Yang Chen, Jingrong Chen, Yong Li and Xiaoming Fu, This Place is Swarming: Using a Mobile Social App to Study Human Traffic in Cities, *5th IEEE International Workshop on Crowd Assisted Sensing, Pervasive Systems and Communications (CASPer'18)*, in conjunction with *IEEE PerCom 2018*, Athens, Greece, Mar. 2018.
 18. Xiang Lan, Yuezhi Zhou, Di Zhang, Xinggong Wang, Xiaoming Yao, Xiaoming Fu, Cloud-Assisted Trajectory Data Management and Analysis: A Case Study, *ACM CoNEXT Workshop on Cloud-Assisted Networking (CAN 2017)*, Seoul, Korea, Dec. 2017.
 19. Hong Huang, Shichang Ding, Taoxiong Liu, Xu Wang, Xiaoming Fu, Understanding Urban

- Mobility from Public Transportation Perspective Using Smart-Card Data: The Case of Shanghai, INSNA Sunbelt 2017, Beijing, China, June 2017.
20. Hong Huang, Lu Zheng, Xiaoming Fu, The Life Cycle of One Triad: An Alternative Perspective from Weibo, INSNA Sunbelt 2017, Beijing, China, June 2017.
 21. David Koll, Martin Schwarzmaier, Jun Li, Xiang-Yiang Li, Xiaoming Fu, Thank You for Being A Friend: An Attacker View on Online-Social-Network-based Sybil Defenses, The 9th International Workshop on Hot Topics in Planet-Scale Mobile Computing and Online Social Networking (HotPOST'17), in conjunction with IEEE ICDCS 2017, Atlanta, GA, June 2017. (Best Paper Award)
 22. Fengli Xu, Zhen Tu, Yong Li, Pengyu Zhang, Xiaoming Fu and Depeng Jin, Trajectory Recovery From Ash: User Privacy Is NOT Preserved in Aggregated Mobility Data, Proceedings of 26th International World Wide Web Conference (WWW 2017), Perth, Australia, ACM, April 2017.
 23. Yang Chen, Cong Ding, Jiyao Hu, Ruichuan Chen, Pan Hui, Xiaoming Fu, Building and Analyzing a Global Co-Authorship Network Using Google Scholar Data, Proceedings of 26th International World Wide Web Conference (WWW 2017) Companion, 4th WWW Workshop on Big Scholarly Data (BigScholar 2017), Perth, Australia, ACM, April 2017.
 24. Christoph Menzel, Xiaoming Fu, Lutz Kolbe, Xu Wang, Ruhua Zhang, Chong Liu, and Yuezhi Zhou, MULMOD - MULtiMODal Sustainable Mobility for Smart Cities in China and Germany, 14th ACM International Conference on Embedded Wireless Systems and Networks (EWSN 2017) poster session, Uppsala, Sweden, February 2017.
 25. Fabian Froese, Xiaoming Fu, Samuel Davies, Hong Huang, Zhenxuan Wang, Which Role Does the Social Network of Expatriates Play in their Career Development?, Proceedings of 42nd Annual Conference of European International Business Academy, Vienna, Austria, December 2016.
 26. Konglin Zhu, Wenzhong Li, Xiaoming Fu, Lin Zhang, VIRO: A Virtual Routing Method for Eliminating Dead End in Opportunistic Mobile Social Networks, 2015 IEEE International Conference on Communications (ICC 2015), London, UK, IEEE, June 2015.
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 28. David Koll, Jun Li, Xiaoming Fu, SOUP: An Online Social Network By The People, For The People, 15th Annual ACM/IFIP/USENIX Middleware Conference (Middleware 2014), Bordeaux, France, Dec 2014.
 29. Stephan Sigg, Xiaoming Fu, Social Opportunistic Sensing and Social Centric Networking - Enabling technology for Smart Cities, ACM International Workshop on Wireless and Mobile Technologies for Smart Cities (WiMobCity 2014), in conjunction with MobiHoc 2014, Philadelphia, PA, USA, August 2014.
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 31. Konglin Zhu, Wenzhong Li, Xiaoming Fu, Jan Nagler, How do online social networks grow?, PLoS ONE, 9(6): e100023, doi:10.1371/journal.pone.0100023, June 2014.
 32. Farshid Hassani Bijarbooneh, Wei Du, Edith Ngai, Xiaoming Fu, Energy-Efficient Sensor Selection for Data Quality and Load Balancing in Wireless Sensor Networks, IEEE/ACM International Symposium on Quality of Service (IWQoS 2014), Hong Kong, pages 338-343, IEEE, May 2014.

33. Hao Liu, Yaoxue Zhang, Yuezhi Zhou, Di Zhang, Xiaoming Fu, K. K. Ramakrishnan, Mining Checkins From Location-sharing Services for Client-independent IP Geolocation, IEEE INFOCOM 2014, Toronto, Apr 2014.
34. Hong Huang, Jie Tang, Sen Wu, Lu Liu, Xiaoming Fu, Mining Triadic Closure Patterns in Social Networks, 23rd International World Wide Web Conference (WWW 2014), Web Science Track, Seoul, Korea, April 2014.
35. Cong Ding, Yang Chen, Xiaoming Fu, Crowd Crawling: Towards Collaborative Data Collection for Large-scale Online Social Networks, 1st ACM Conference on Online Social Networks (COSN 2013), Oct 2013.
36. Lei Jiao, Jun Li, Xiaoming Fu, Optimizing Data Center Traffic of Online Social Networks, The 19th IEEE International Workshop on Local and Metropolitan Area Networks (LANMAN 2013), Brussels, Belgium, April 2013. (Best Paper Award)
37. Florian Tegeler, Xiaoming Fu, Giovanni Vigna and Christopher Krügel, Finding Bots in Network Traffic Without Deep Packet Inspection, ACM CoNEXT 2012, Nice, France, December 2012.
38. Lei Jiao, Jun Li, Tianyin Xu, Xiaoming Fu, Cost Optimization for Online Social Networks on Geo-Distributed Clouds, 20th IEEE International Conference on Network Protocols (ICNP 2012), Austin, TX, USA, Nov 2012.
39. Sufian Hameed, Alexander Wolf, Konglin Zhu, Xiaoming Fu, Evaluation of Human Altruism Using a DTN-based Mobile Social Network Application, 5th workshop on Digital Social Networks (DSN 2012) in conjunction with Gesellschaft für Informatik (GI 2012), Braunschweig, Germany, Sept. 2012.
40. Lianghao Dai, Jarder Luo, Xiaoming Fu, Zhichao Li, Predicting offline behaviors from online features — an ego-centric dynamical network approach, Proceedings of First ACM International Workshop on Interdisciplinary Social Networks Research (HotSocial 2012), Beijing, China, in conjunction with ACM KDD 2012, ISBN 978-1-4503-1549-4, August 2012.
41. Sufian Hameed, Tobias Kloht, Xiaoming Fu, iSATS: Leveraging Identity Based Sender Authentication for Spam Mitigation, International Conference on Security and Cryptography (Secrypt), Rome, Italy, July 2012.
42. Florian Tegeler, David Koll, and Xiaoming Fu, GEMSTONE: Empowering Decentralized Social Networking with High Data Availability, IEEE GLOBECOM 2011 - Social Networks Track, Houston, TX, USA, IEEE, December 2011.
43. Tianyin Xu, Yang Chen, Lei Jiao, Ben Y. Zhao, Pan Hui, Xiaoming Fu, Scaling Microblogging Services with Divergent Traffic Demands, ACM/IFIP/USENIX 12th International Middleware Conference (Middleware'11), LNCS 7049, pp. 20-40, Dec. 2011.
44. Sufian Hameed, Xiaoming Fu, Pan Hui and Nishanth Sastry, LENS: Leveraging Social Networking and Trust to Prevent Spam Transmission, The Second IEEE Workshop on Security & Trust in the Future Internet (FIST'11), Co-located with IEEE ICNP 2011, Vancouver, BC Canada, October 2011.
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Editorials, Books and Book Chapters:

1. James Evans, Xiaoming Fu, Jar-Der Luo, Inaugural Message from Editors-in-Chief, *Journal of Social Computing*, IEEE, 1:i-iv, Sept 2020.
2. Xiaoming Fu, Andrea Passarella, Daniele Quercia, Alessandra Sala, Thorsten Strufe, Online Social Networks (Guest editorial), *Computer Communications*, 73 (part B): 163–166, Elsevier, Jan. 2016.
3. Xiaoming Fu, Jar-Der Luo, Margarete Boos (eds.), *Social Network Analysis: Interdisciplinary Approaches and Case Studies*, CRC Press, Taylor & Francis Group, ISBN 1498736645, Mar 2017.
4. Xiaoming Fu, Jar-Der Luo, Margarete Boos, *Methods for Interdisciplinary Social Network Studies*, in: X. Fu, J.-D. Luo, M. Boos (eds.), *Social Network Analysis: Interdisciplinary Approaches and Case Studies*, Chapter 1, CRC Press, Taylor & Francis Group, ISBN 1498736645, Mar 2017.
5. Jar-Der Luo, Xiao Han, Ronald Burt, Chaowen Zhou, Meng-Yu Cheng, Xiaoming Fu, *The Measurement of Guanxi Circles - Using Qualitative Study to Modify Quantitative Measurement*, in: X. Fu, J.-D. Luo, M. Boos (eds.), *Social Network Analysis: Interdisciplinary Approaches and Case Studies*, Chapter 4, CRC Press, Taylor & Francis Group, ISBN 1498736645, Mar 2017.
6. Wenzhong Li, Sanglu Lu, Konglin Zhu, Xiao Chen, Jan Nagler, Xiaoming Fu, *Information Dissemination in Social-Featured Opportunistic Networks*, in: X. Fu, J.-D. Luo, M. Boos (eds.), *Social Network Analysis: Interdisciplinary Approaches and Case*, Chapter 13, CRC Press, Taylor & Francis Group, Mar 2017.

Related Links:

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Other related journals and conferences:

- IEEE Transactions on {Data and Knowledge Engineering, Cybernetics, Network Science and Engineering, Mobile Computing, Big Data, Pattern Analysis and Machine Intelligence, Neural Networks and Learning Systems}, ACM Transactions on {Knowledge and Data Discovery, The Web, Social Computing, Multimedia, Data Science, Cyber-Physical Systems}, Expert Systems with Applications, Knowledge-based Systems, Journal of Machine Learning Research, Neurocomputing, Neural Networks, Pattern Recognition, Journal of Artificial Intelligence, Machine Learning, Information Systems, Social Networks, Journal of Computational Social Science, Big Data Research, Social Media+Society, ...
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