



Keli Xiao

Assistant Professor College of Business Stony Brook University
Adjunct Assistant Professor Data Mining,
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RESEARCH AREAS

Business Analytics
Data Analytics
Urban Computing
Quantitative Finance
Asset Pricing
Eco-nomic Bubbles and Crises

TEACHING AREAS

Data Analysis for Finance
Data Mining
International Finance

EDUCATION

- Ph.D., Management (Finance), 2013
 - Rutgers Business School - Newark and New Brunswick
 - Rutgers, The State University of New Jersey, USA
- M.S., Quantitative Finance, 2009
 - Rutgers Business School - Newark and New Brunswick
 - Rutgers, The State University of New Jersey, USA
- M.A., Computer Science, 2008
 - Queens College, The City University of New York, USA
- B.E., Computer Science, 2006
 - Wuhan University of Technology, China

EXPERIENCE

- Associate Professor (with Tenure), Management (Decision Analytics), Finance College of Business Stony Brook University (SUNY at Stony Brook), 2020 - present
- Assistant Professor, Management (Decision Analytics), Finance College of Business Stony Brook University (SUNY at Stony Brook), 2013 - 2020

EXPERIENCE

- Lecturer, Dept. of Finance & Economics j Dept. of Management Science & Information Systems
Rutgers Business School - Newark and New Brunswick
Rutgers, The State University of New Jersey, 2011 – 2013

BOOKS

Field Editor, The "Mobile Economy" Section, in Encyclopedia of GIS, 2nd Edition (ISBN: 978-3-319-17886-8), Springer, 2017

REFEREED ARTICLES

- Pengzhan Guo, Keli Xiao?, Zeyang Ye and Wei Zhu. Route Optimization via Environment-Aware Deep Network and Reinforcement Learning. ACM Transactions on Intelligent Sys-tems and Technology (TIST), forthcoming.
- Yue Qu, Chuanren Liu, Kai Zhang, Keli Xiao, Bo Jin, and Hui Xiong. Diagnostic Sparse Connectivity Networks with Regularization Template. IEEE Transactions on Knowledge and Data Engineering (TKDE), forthcoming.
- Pengzhan Guo, Zeyang Ye, Keli Xiao?, and Wei Zhu. Weighted Aggregating Stochastic Gra-dient Descent for Parallel Deep Learning. IEEE Transactions on Knowledge and Data Engineering (TKDE), forthcoming.
- Degen Huang, Kaiyu Huang, Keli Xiao, Fengran Mo, Bo Jin, and Zhuang Liu. Domain-Aware Word Segmentation for Chinese Language: A Document-Level Context-Aware Model. ACM Transactions on Asian and Low-Resource Language Information Processing (TAL-LIP), forthcoming.
- Yang An, Yakun Mao, Liang Zhang, Bo Jin, Keli Xiao, Xiaopeng Wei, and Jun Yan. 2020. RAHM: Relation Augmented Hierarchical Multi-Task Learning Framework for Reasonable Med-ication Stocking. Journal of Biomedical Informatics 108, Article 103502.
- Keli Xiao*#, Zeyang Ye#, Lihao Zhang, Wenjun Zhou, Yong Ge, and Yuefan Deng. 2020. Multi-User Mobile Sequential Recommendation for Route Optimization. ACM Transactions on Knowledge Discovery from Data (TKDD) 14(5), 52:1-52:28.
- Zhuang Liu, Keli Xiao, Bo Jin, Kaiyu Huang, Degen Huang, and Yunxia Zhang. 2020. Uni_ed Generative Adversarial Networks for Multiple-Choice Oriented Machine Comprehension. ACM Transactions on Intelligent Systems and Technology (TIST) 11(3), 25:1-25:20.
- Zhenya Huang, Qi Liu, Yuying Chen, Le Wu, Keli Xiao, Enhong Chen, Haiping Ma, and Guoping Hu. 2020. Learning or Forgetting? A Dynamic Approach for Modeling the Knowledge Pro_ciciency of Students. ACM Transactions on Information Systems (TOIS) 38(2), 19:1-19:33.
- Changxuan Wan, Yun Peng, Keli Xiao?, Xiping Liu, Tengjiao Jiang, and Dexi Liu. 2020. An Association-Constrained LDA Model for Joint Extraction of Product Aspects and Opinions. Information Sciences 519, 243-259.
- Frank J. Fabozzi# and Keli Xiao*#. 2019. The Timeline Estimation of Bubbles: The Case of Real Estate. Real Estate Economics 27(2), 564-594.
- Zeyang Ye, Keli Xiao?, Yong Ge, and Yuefan Deng. 2019. Applying Simulated Annealing and Parallel Computing to the Mobile Sequential Recommendation. IEEE Transactions on Knowledge and Data Engineering (TKDE) 31(2), 243-256.

REFEREED ARTICLES

- Jinwen Sun#, Keli Xiao*#, Chuanren Liu, Wenjun Zhou, and Hui Xiong. 2019. Exploiting Intra-day Patterns for Market Shock Prediction: A Machine Learning Approach. *Expert Systems with Applications* 127, 272-281.
- Keli Xiao?, Qi Liu, Chuanren Liu, and Hui Xiong. 2018. Price Shock Detection With an Influence-Based Model of Social Attention. *ACM Transactions on Management Information Systems (TMIS)* 9(1), 2:1-2:21.
- Wenjun Zhou, Hui Xiong, Lian Duan, Keli Xiao, and Robert Mee. 2018. Paradoxical Correlation Pattern Mining. *IEEE Transactions on Knowledge and Data Engineering (TKDE)* 30(8), 1561-1574.
- Frank J. Fabozzi# and Keli Xiao*#. 2017. Explosive Rents: The Real Estate Market Dynamics in Exuberance. *The Quarterly Review of Economics and Finance* 66, 100-107.
- Chuanren Liu, Hui Xiong, Spiros Papadimitriou, Yong Ge, and Keli Xiao. 2017. A Proactive Workflow Model for Healthcare Operation and Management. *IEEE Transactions on Knowledge and Data Engineering (TKDE)* 29(3), 586-598.
- Hao Chen, Keli Xiao, Jinwen Sun, and Song Wu. 2017. A Double-Layer Neural Network Framework for High-Frequency Forecasting. *ACM Transactions on Management Information Systems (TMIS)* 7(4), 11:1-11:17.
- Liuzhi Yin, Yong Ge, Keli Xiao, Xuehua Wang, and Xiaojun Quan. 2013. Feature Selection for High-Dimensional Imbalanced Data. *Neurocomputing* 105, 3-11.
- Jinlin Chen and Keli Xiao. 2010. BISC: A Bitmap Itemset Support Counting Approach for Efficient Frequent Itemset Mining. *ACM Transactions on Knowledge Discovery from Data (TKDD)* 4(3), 12:1-12:37.

CHAPTERS IN BOOKS

Keli Xiao? and Li Zhang. 2017. Financial Asset Analysis with Mobile GIS. In Shekhar, S., Xiong, H., & Zhou, X. (Eds.), *Encyclopedia of GIS*, 2nd Edition. Springer.

PRESENTATIONS

- Xiao, K., The 2018 IEEE International Conference on Data Mining (Session: Social), "CADEN: A Context-Aware Deep Embedding Network for Financial Opinions Mining," IEEE, Singapore. (November 2018).
- Xiao, K., The 2018 INFORMS Annual Meeting (Session: Natural Language Processing and User Generated Content), "Exploring the True Meaning behind Words: The Lexicon Creation for Investor Sentiment," INFORMS, Phoenix, AZ, United States. (November 2018).
- Xiao, K., The 2017 INFORMS Annual Meeting (Session: Big Data), "Individual Social Behavior and Intra-day Patterns in Market Movements," INFORMS, Houston, TX, United States. (October 2017).
- Xiao, K., Organizations Management Groups (OMG) Seminar Series, "Exploiting Expert Opinions for Price Shocks Prediction," Stony Brook University, Stony Brook, United States. (October 7, 2016).
- Xiao, K., The 2016 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, "Forecasting Price Shocks with Social Attention and Sentiment Analysis," San Francisco, CA, United States. (August 2016).
- Xiao, K., "The Timeline Estimation of Bubbles: The Case of Real Estate," Shandong University of Finance and Economics, China. (June 2016).

PRESENTATIONS

- Xiao, K., Finance Area Research (FAR) Seminar Series, "Sentiment analysis and market e_iciency," Stony Brook University, Stony Brook, NY, United States. (April 7, 2016).
- Xiao, K., The Workshop on Big Data and Super Computing, "Big Data and Finance: The Case of Stock Analysis," San Yat-sen University, Guangzhou. (December 2015).
- Xiao, K., Finance Area Research (FAR) Seminar Series, "The Timeline Estimation of Bubbles: The Case of Real Estate," Stony Brook University, Stony Brook, United States. (2015).
- Xiao, K., The 2013 INFORMS Annual Meeting (Session: Business Analytics in the Big Data Era), "Multi-source Information Fusion for Residential Real Estate Ranking." (October 2013).