Xianfeng Tang

E342 Westgate Building
University Park, PA, 16802
+1 (814) 954-9243
xut10@psu.edu
www.tangxianfeng.net

RESEARCH INTERESTS

Machine Learning, Data mining, Graph-structured Data.

EDUCATION

Pennsylvania State University
University Park, Pennsylvania
Ph.D. candidate in Information Sciences and Technology   08/2016 - Present
Advisor: Prof. Prasenjit Mitra and Prof. Suhang Wang

University of Science and Technology of China
Hefei, Anhui, China
B.E in Computer Science and Technology (honored class)   08/2012 - 06/2016
Excellent Graduate Student

EXPERIENCE

Research Intern   05/2020 - Present
Pinterest Labs, San Francisco, CA
Project: Modeling sequential user information for homefeed recommendations

Research Intern   09/2019 - 12/2019
Snap Inc., Santa Monica, CA
Project: Explainable user engagement prediction/analysis

Research Intern   05/2019 - 08/2019
Bytedance Inc., Palo Alto, CA
Project: Cold-start recommendation for short videos on Tiktok

Research Intern   05/2018 - 08/2018
Intellifusion Inc., Shenzhen, China
Mentor: Dr. Xiaoyu Wang, Prof. Tianbao Yang
Projects: Modeling trajectory with reinforcement learning

Research Intern   07/2015 - 06/2016
Microsoft Research Asia, Beijing, China
Mentor: Dr. Yong Cao
Projects: Text mining; chatting bot; document classification

PUBLICATIONS

* indicates equal contribution
Google Scholar
Pre-print/Under Review:

[P1] Yiwei Sun, Suhang Wang, Tsung Yu Hsieh, **Xianfeng Tang**, Deokjin Joo and Vasant Honavar, "Data Poisoning Attacks on Heterogeneous Graph Neural Networks: A Reinforcement Learning Approach".

[P2] **Xianfeng Tang**, Yi Xu, Xiaoyu Wang, Suhang Wang, Prasenjit Mitra, Tianbao Yang, "Efficient Optimization with Non-Ergodic Convergence for Learning with Complex Hard and Soft Constraints".

Peer-Reviewed Papers:

1. **Xianfeng Tang**, Yozen Liu, Neil Shah, Xiaolin Shi, Prasenjit Mitra, Suhang Wang, "Explainable User Engagement Prediction for Social Apps: A Case Study of Snapchat", KDD 2020

2. Wei Jin, Yao Ma, Xiaorui Liu, **Xianfeng Tang**, Suhang Wang and Jiliang Tang, "Graph Structure Learning for Robust Graph Neural Networks", KDD 2020 (PDF)

3. Peng Lv, Yanwei Yu, Yangyang Fan, **Xianfeng Tang**and Xiangrong Tong, "Layer-constrained variational autoencoding kernel density estimation model for anomaly detection", Knowledge-Based Systems (PDF)

4. Kai Chen, Yanwei Yu, Peng Song, **Xianfeng Tang**, Lei Cao and Xiangrong Tong, "Find you if you drive: Inferring home locations for vehicles with surveillance camera data", Knowledge-Based Systems (PDF)

5. Yiwei Sun, Suhang Wang, **Xianfeng Tang**, Tsung-Yu Hsieh and Vasant Honavar, "Node Injection Poisoning Attacks on Graphs: A Hierarchical Reinforcement Learning Approach", The Web Conference 2020 (PDF)

6. **Xianfeng Tang**, Huaxiu Yao, Charu C Aggarwal, Prasenjit Mitra, Suhang Wang, "Joint Modeling of Local and Global Temporal Dynamics for Multivariate Time Series Forecasting with Missing Values", AAAI 2020 (PDF)

7. **Xianfeng Tang**, Yandong Li, Yiwei Sun, Huaxiu Yao, Prasenjit Mitra, Suhang Wang, "Transferring Robustness for Graph Neural Network Against Poisoning Attacks", WSDM 2020 (PDF)

8. Yanwei Yu*, **Xianfeng Tang***, Huaxiu Yao, Xiuwen Yi, Zhenhui Li, "Citywide Traffic Volume Inference with Surveillance Camera Records", IEEE Transactions on Big Data (PDF)

9. Yiwei Sun, Suhang Wang, Tsung-Yu Hsieh, **Xianfeng Tang**, Vasant Honavar. "MEGAN: A Generative Adversarial Network for Multi-View Network Embedding", IJCAI 2019 (PDF)

10. **Xianfeng Tang**, Boqing Gong, Yanwei Yu, Huaxiu Yao, Yandong Li, Haiyong Xie, Xiaoyu Wang, "Joint Modeling of Dense and Incomplete Trajectories for Citywide Traffic Volume Inference", The Web Conference 2019 (PDF)

11. Huaxiu Yao, Yiding Liu, Ying Wei, **Xianfeng Tang**, Zhenhui Li, "Learning from Multiple Cities: A Meta-Learning Approach for Spatial-Temporal Prediction", The Web Conference 2019 (PDF)

12. Huaxiu Yao*, **Xianfeng Tang***, Hua Wei, Guanjie Zheng, Zhenhui Li, "Revisiting Spatial-Temporal Similarity: A Deep Learning Framework for Traffic Prediction", AAAI Conference on Artificial Intelligence (AAAI) 2019 (PDF) (Github)

13. Hongjian Wang, **Xianfeng Tang**, Yu-Hsuan Kuo, Daniel Kifer, Zhenhui Li, "A Simple Baseline for Travel Time Estimation using Large-Scale Trip Data", ACM Transactions on Intelligent Systems and Technology (TIST) 10, no. 2 (2019): 19. (PDF)

14. Huaxiu Yao, Fei Wu, Jintao Ke, **Xianfeng Tang**, Yitian Jia, Siyu Lu, Pinghua Gong, Jieping Ye, Zhenhui Li, "Deep Multi-View Spatial-Temporal Network for Taxi Demand Prediction", AAAI Conference on Articial Intelligence (AAAI) 2018 (PDF)

15. Yanwei Yu, Huaxiu Yao, Hongjian Wang, **Xianfeng Tang**, Zhenhui Li, "Representation Learning for Large-scale Dynamic Networks", Database Systems for Advanced Applications (DASFAA) 2018 (PDF)

HONORS AND AWARDS	IST Graduate Student Travel Award, Penn State	2020
	IST Graduate Student Travel Funding, Penn State	2019
	Rednor Graduate Fellowship, Penn State	2016
	Tomorrow Star, Microsoft Research Asia	2016
	Guoshen Sun Leadership Scholarship	2015
	3rd Prize of Student Cluster Competition, SC14	2014
	4th AEGON-INDUSTRIAL Fund Responsibility Scholarship	2014
	USTC Outstanding Student Scholarship	2013
	USTC Admission Scholarship for Outstanding Student	2012
	First Prize, Olympiad in Mathematics, Anhui Province, China	2011

SERVICES

Reviewer & External Reviewer: KDD'19, IJCAI'19, WSDM'19, AAAI'20, IEEE BigData'20, etc.

SKILLS

Programming Languages: Python, C#, C/C++, Java, SQL, Matlab
Tools & Frameworks: TensorFlow, PyTorch, scikit-learn

PROFESSIONAL REFERENCE

Prasenjit Mitra, Ph.D.
Professor of Information Sciences and Technology
The Pennsylvania State University
Phone: (814) 865-2379
E-mail: pmitra@psu.edu
Relationship: Ph.D advisor, committee member

Suhang Wang, Ph.D
Assistant Professor of Information Sciences and Technology
The Pennsylvania State University
Phone: (814)-865-2453
E-mail: szw494@psu.edu
Relationship: Ph.D co-advisor, committee member