ZHIMENG JIANG

CONTACT INFORMATION

Email: zhimengj@tamu.edu   *Phone:* (979)-985-1898   Homepage

EDUCATION

Texas A&M University (TAMU)   *College Station, TX, U.S.*
Ph.D. in Computer Science and Engineering   *Sep. 2019 - Present*
Advisor: Prof. Xia "Ben" Hu

University of Science and Technology of China (USTC)   *Hefei, Anhui, China*
M.Eng. in Electronic Engineering and Information Science (EEIS)   *Sep. 2016 - Jun. 2019*
Advisor: Prof. Chen Gong & Zhengyuan Xu

Harbin Institute of Technology (HIT)   *Harbin, Heilongjiang, China*
B.E. in Electronic Information Engineering   *Sep. 2012 - Jun. 2016*
GPA: 91.54/100 (top 2% out of 100)

RESEARCH INTERESTS

Trustworthy Machine Learning: boosting **fairness** & **robustness** of DNNs and GNNs.

Display Advertising: Bid optimization, Click-Through-Rate Prediction.

PUBLICATIONS

[Under Review1] **Z. Jiang**, K. Zhou, M. Zhang, R. Chen, X. Hu, S. Choi, "Risk-Aware Reinforcement Learning Based Bid Optimization".

[Under Review2] **Z. Jiang**, K. Zhou, Z. Liu, L. Li, R. Chen, S. Choi, X. Hu, "An Information Fusion Approach to Learning with Instance-Dependent Label Noise".

[Under Review3] **Z. Jiang**, X. Han, C. Fan, F. Yang, A. Mostafavi, X. Hu, "Generalized Demographic Parity for Group Fairness".

[Under Review4] X. Han, **Z. Jiang**, N. Liu, Q. Song, J. Li, X. Hu, "Geometric Graph Representation Learning via Maximizing Rate Reduction".

[Under Review5] X. Han, **Z. Jiang**, N. Liu, X. Hu, "G-Mixup: Graph Augmentation for Graph Classification".

[TCOM'21] **Z. Jiang**, C. Gong, G. Wang, Z. Xu, "On the achievable rate and capacity of a sample-based practical photon-counting receiver", in IEEE Transactions on Communications, Sept. 2021.

[TWC'19] **Z. Jiang**, C. Gong and Z. Xu, "Achievable Rates and Signal Detection for Photon-Level Photomultiplier Receiver Based on Statistical Non-Linear Model," in IEEE Transactions on Wireless Communications, Dec. 2019.

[JCIN'20] **Z. Jiang**, C. Gong, Z. Xu, "On the sum-rate capacity of Poisson multiple access channel with a sample-based practical photon-counting receiver", in Journal of Communications and Information Networks, Sep. 2020.

RESEARCH EXPERIENCES

Graduate Research Assistant, DATA Lab at TAMU University   Sep. 2019 - Present
Supervisor: Dr. Xia Hu

- Conduct research on trustworthy machine learning, including algorithmic fairness over continuous sensitive attributes (Under Review 3), weakly-supervised learning under label noise (Under Review 2), GNN with fair message passing, and fairness-aware pruning.

- Conduct research on risk-aware bid optimization for advertisement display (Under Review 1).

Deep Learning Engineer Intern, Samsung Research America   May 2020 - Aug. 2020
Supervisor: Dr. Li Li, Dr. Rui Chen

- Improved the click-through-rate prediction of the production model via multi-task learning.

HONORS AND AWARDS

Chinese Undergraduates Mathematics Competitions, 1st class (Rank: 6/60k+)	*Mar. 2015*
National Scholarship for Outstanding Graduate Student (top 3%)	*USTC, Oct. 2018*
National Scholarship for Outstanding Graduate Student (top 1%)	*HIT, Sep. 2015*
Outstanding Graduate Students Awards, USTC & Anhui Province	*Apr. 2019*
Outstanding Undergraduate Students Awards	*HIT, Jul. 2016*
China Aerospace Science and Technology Corporation Grants	*HIT, 2013,2014, 2015*

TECHNICAL SKILLS

Programming Languages	Python, C, C++, Matlab, R
Libraries & Tools	TensorFlow, PyTorch, Vim, LaTeX

SERVICE

- Conference Reviewer: ICLR'20, KDD'20, CIKM'20, WSDM'21

- Journal Reviewer: IEEE Transactions on Information Forensics and Security, Digital Signal Processing, IEEE Communications Letter, IEEE Wireless Communications Letter, EURASIP Journal on Wireless Communications and Networking