# ZHIMENG JIANG

## CONTACT INFORMATION

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## 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

[AAAI'22]    **Z. Jiang**, K. Zhou, M. Zhang, R. Chen, X. Hu, S. Choi, "Risk-Aware Reinforcement Learning Based Bid Optimization", Under Review.

[ICLR'22]    **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 Review.

[ICLR'22]    **Z. Jiang**, X. Han, C. Fan, F. Yang, A. Mostafavi, X. Hu, "Generalized Demographic Parity for Group Fairness", Under Review.

[ICLR'22]    X. Han, **Z. Jiang**, N. Liu, X. Hu, "G-Mixup: Graph Augmentation for Graph Classification", Under Review.

[WWW'22]    X. Han, **Z. Jiang**, N. Liu, Q. Song, J. Li, X. Hu, "Geometric Graph Representation Learning via Maximizing Rate Reduction", Under Review.

[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

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|---|---|
| **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

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|---|---|
| **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