

张家儒

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🎓 教育背景

- 上海交通大学, 上海, 在读博士研究生 2019 – 2024
计算机科学与技术, 导师: 管海兵, 研究方向: 贝叶斯神经网络、对抗攻防、因果发现
- 上海交通大学, 上海, 学士 2015 – 2019
上海交通大学优秀毕业生, 计算机科学与技术 (IEEE 试点班)
- 华盛顿大学, 西雅图, 电类工程国际强化项目 2017.6 - 2017.8

▶ 实习经历

- 微软亚洲研究院, 北京 2022.11 - 2023.8
数据、知识、智能组, 指导老师: 丁锐
- 基于 transformer 深度神经网络结构, 解决有监督的观测数据因果发现问题
 - 探索现有解决方法的不足及改进方案, 分别作为第一作者和合作者投稿顶会论文一篇
- 中国国际金融股份有限公司, 上海 2023.8 - 2023.9
研究部
- 复现使用深度神经网络的因子挖掘技术
 - 探索使用贝叶斯神经网络建模因子不确定性以及自注意力机制建模股票间关系

🏆 学术成果

- **Jiaru Zhang**, Yang Hua, Tao Song, Hao Wang, Zhengui Xue, Ruhui Ma, Haibing Guan. Information Bound and its Applications in Bayesian Neural Networks. Accepted by ECAI 2023 (CCF-B).
- **Jiaru Zhang**, Yang Hua, Tao Song, Hao Wang, Zhengui Xue, Ruhui Ma, Haibing Guan. Improving Bayesian Neural Networks by Adversarial Sampling. In AAAI 2022 (CCF-A).
- **Jiaru Zhang**, Yang Hua, Zhengui Xue, Tao Song, Chengyu Zheng, Ruhui Ma, Haibing Guan. Robust Bayesian Neural Networks by Spectral Expectation Bound Regularization, In CVPR 2021 (CCF-A).
- **Jiaru Zhang**, Ruhui Ma, Tao Song, Yang Hua, Zhengui Xue, Chenyang Guan, Haibing Guan. Hierarchical Satellite System Graph for Approximate Nearest Neighbor Search on Big Data. ACM Transactions on Data Science, 2(4), 1-15, 2022.
- Chumeng Liang*, Xiaoyu Wu*, Yang Hua, **Jiaru Zhang**, Yiming Xue, Tao Song, Zhengui Xue, Ruhui Ma, Haibing Guan. Adversarial Example Does Good: Preventing Painting Imitation from Diffusion Models via Adversarial Examples. In ICML 2023 (CCF-A, oral).

🏆 比赛项目

- 基于 Unimp 算法的论文引用网络节点分类 2020.11
- 实现了 Unimp 算法进行论文引用网络节点初步分类, 使用简单的集成学习方法进一步提升性能。
 - 在百度组织的论文引用网络节点分类比赛¹ 的 2020-11 赛季的 222 个参与者中取得第一名。

♡ 获奖情况

- 电科十四所国睿奖学金 2021
三好学生 2018, 2020, 2021
优秀团员 2016, 2020, 2021
优秀学生干部 2016

¹ <https://aistudio.baidu.com/aistudio/competition/detail/59>

JIARU ZHANG

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🎓 EDUCATION BACKGROUND

Shanghai Jiao Tong University, Shanghai, *Ph.D Candidate* 2019 – 2024

Computer Science and Technology. Supervisor: Haibing Guan. Research interests: Bayesian Neural Networks, Adversarial Attack and Defense, Causal Discovery

Shanghai Jiao Tong University, Shanghai, *Bachelor* 2015 – 2019

Outstanding graduate of SJTU, Computer Science and Technology (IEEE Honor class)

• **University of Washington**, Seattle, *Electrical Engineering International Intensive program* 2017.6 - 2017.8

▶ INTERNSHIP EXPERIENCES

Microsoft Research Asia, Beijing 2022.11 - 2023.8

Data, Knowledge, Intelligence Group, Mentor: Justin Ding

- Solve supervised causal discovery problem based on transformer neural network architecture
- Explore better solutions and submit two papers to a top conference as first author and co-author separately

China International Capital Corporation Limited, Shanghai 2023.8 - 2023.9

Research Department

- Reproduce factor mining techniques based on deep neural networks
- Explore the use of Bayesian neural networks to model factor uncertainty and self-attention mechanisms to model relationships between stocks

👤 ACADEMIC PUBLICATIONS

- **Jiaru Zhang**, Yang Hua, Tao Song, Hao Wang, Zhengui Xue, Ruhui Ma, Haibing Guan. Information Bound and its Applications in Bayesian Neural Networks. Accepted by ECAI 2023 (CCF-B).
- **Jiaru Zhang**, Yang Hua, Tao Song, Hao Wang, Zhengui Xue, Ruhui Ma, Haibing Guan. Improving Bayesian Neural Networks by Adversarial Sampling. In AAAI 2022 (CCF-A).
- **Jiaru Zhang**, Yang Hua, Zhengui Xue, Tao Song, Chengyu Zheng, Ruhui Ma, Haibing Guan. Robust Bayesian Neural Networks by Spectral Expectation Bound Regularization, In CVPR 2021 (CCF-A).
- **Jiaru Zhang**, Ruhui Ma, Tao Song, Yang Hua, Zhengui Xue, Chenyang Guan, Haibing Guan. Hierarchical Satellite System Graph for Approximate Nearest Neighbor Search on Big Data. ACM Transactions on Data Science, 2(4), 1-15, 2022.
- Chumeng Liang*, Xiaoyu Wu*, Yang Hua, **Jiaru Zhang**, Yiming Xue, Tao Song, Zhengui Xue, Ruhui Ma, Haibing Guan. Adversarial Example Does Good: Preventing Painting Imitation from Diffusion Models via Adversarial Examples. In ICML 2023 (CCF-A, oral).

👤 CONTEST PROJECTS

Paper Citation Network Nodes Classification based on Unimp Algorithm 2020.11

- Use the Unimp algorithm for classification and further improve it with a simple ensemble learning method.
- Get the first place among 222 teams in the 2020-11 season in a competition¹ organized by Baidu.

♡ AWARDS & HONORS

CETC The 14TH Research Institute Glarun Scholarship 2021
Three Good Student 2018, 2020, 2021
Excellent League Member 2016, 2020, 2021
Excellent Student Cadre 2016

¹<https://aistudio.baidu.com/aistudio/competition/detail/59>