Jiaxu Zhao

PhD Candidate,
TU Eindhoven

✉ j.zhao@tue.nl
📞 +31 687 286 408

Languages

🇨🇳 Chinese ● ● ● ● ●
🇬🇧 English ● ● ● ● ○
🇳🇱 Dutch ● ● ○ ○ ○

Skills

Coding: Python, C
Technical: Keras, Pytorch, Matlab

Research Interests

Large Language Models
Fairness and Bias in NLP
Causal Reasoning
Sparse Neural Network

About Me

I thrive on communication and collaboration, finding inspiration in engaging with diverse perspectives. The exchange of ideas has always fueled my curiosity and creativity.

I firmly believe in the significance of fairness, a value that transcends every aspect of life and research. Striving for a just world is not just a goal; it is an integral part of both my personal ethos and academic pursuits.

Beyond the academic adventure, I also dive into photography, squash, horse riding, and badminton.

Education

2021.9 – 2025.9	**Eindhoven University of Technology** Research Group: Mathematics & Computer Science, Data Mining Supervisors: Mykola Pechenizkiy, Meng Fang, Yulong Pei Research direction: Fairness and Bias in Generative Language Models
2018.9 – 2021.7	**University of Electronic Science and Technology of China** Research Group: Computer Technology, CI Lab Supervisors: Xiaobin Wang, Hong Qu Thesis: The Research and Solution of Exposure Bias in Neural Machine Translation.

Slected Publications

CHAmbi: A New Benchmark on Chinese Ambiguity Challenges for Large Language Models *Qin Zhang, Sihan Cai, **Jiaxu Zhao**, Mykola Pechenizkiy, Meng Fang, EMNLP findings 2024*

More than Minorities and Majorities: Understanding Multilateral Bias in Language Generation ***Jiaxu Zhao**, Zijing Shi, Yitong Li, Yulong Pei, Ling Chen, Meng Fang, Mykola Pechenizkiy. ACL findings 2024*

CHBias: Bias Evaluation and Mitigation of Chinese Conversational Language Models ***Jiaxu Zhao**, Meng Fang, Zijing Shi, Yitong Li, Ling Chen, Mykola Pechenizkiy ACL 2023*

Rest: Enhancing group robustness in DNNs through reweighted sparse training ***Jiaxu Zhao**, Lu Yin, Shiwei Liu, Meng Fang, Mykola Pechenizkiy. ECML PKDD 2023*

You Can Have Better Graph Neural Networks by Not Training Weights at All: Finding Untrained GNNs Tickets *Tianjin Huang, Tianlong Chen, Meng Fang, Vlado Menkovski, **Jiaxu Zhao**, Lu Yin, Yulong Pei, Decebal Constantin Mocanu, Zhangyang Wang, Mykola Pechenizkiy, Shiwei Liu. LoG 2022 (Oral and Best Paper Award)*

Internship Experience

2023.3 – 2023.6	**Digital Brain Laboratory, Shanghai** Student Research **Project**: Chinese Large Language Models. **Responsibilities**: I took on the crucial responsibility of evaluating fairness and mitigating bias in the Chinese Large Language Model, with a focus on handling toxic content and mitigating social biases. Additionally, I actively contributed to the Reinforcement Learning from Human Feedback (RLHF) training, playing a role in shaping the foundation language model.

Selected Projects

2023.9 – 2024.8	**Responible AI Fall 2023 Research Program** Leaded by Prof. Julia Stoyanovich, New York University Co-supervise with Prof. Mykola Pechenizkiy **Research Project**: Bias Detection in Social Media Discourse Using Large Language Models.
2024.7 – 2024.8	**OpenML AI Search Project** Leaded by OpenML and Prof. Joaquin Vanschoren **Research Project**: Training a dataset recommendation system based on Retrieval-Augmented Generation (RAG) with Large Language Models.
2022.11 – 2023.7	**Master Project** Co-supervise with Prof. Meng Fang **Research Project**: Exploring the synergy within a context-aware and domain-flexible pipeline for neural machine translation.