

Education	<b>The University of Texas at Dallas</b> - Ph.D. in Computer Science - Advisor: <a href="#">Zhiyu Zoey Chen</a>	2024 - Apr. 2027 ( <i>anticipated</i> ) Dallas, TX, USA
	<b>Virginia Tech</b> (transferred out) - Ph.D. in Computer Science	2023 - 2024 Blacksburg, VA, USA
	<b>Soochow University</b> - M.S. in Computer Science - Advisors: <a href="#">Wenliang Chen</a> , <a href="#">Xiabing Zhou</a> - Outstanding Graduate; Outstanding Thesis	2020 - 2023 Suzhou, Jiangsu, China
	<b>Nanjing University of Posts and Telecommunications</b> - B.Eng. in Computer Science - GPA: 3.96 / 5 (Top 3% in the Department)	2016 - 2020 Nanjing, Jiangsu, China

Research Summary

My current research focuses on **post-training techniques** (e.g., reinforcement learning) and **synthetic data generation** to evaluate and equip Large Language Models (LLMs) with reliable and advanced capabilities, such as instruction following [1], reasoning [7], tool using [2,3,4] and efficient inference [5]. I have experience in adapting LLMs for healthcare applications [8,9,10]. I am particularly interested in developing **controllable LLMs**. Topics include complex instruction following [1], smart agentic search [2,4], and instruction hierarchy enforcing.

Before the era of LLMs, my work primarily focused on improving the dialogue abilities of language models—for example, maintaining self-consistency [11] and safety [12] in conversation, as well as understanding the speaker’s core semantic meaning [13] and emotions [14].

Overall, I have published 15 papers in these directions, including 9 first-authored papers and 10 peer-reviewed publications in top-tier AI conferences.

Research Experiences	<b>Human Language Technology Research Institute at UTD</b> <i>Student Researcher</i> (Advisor: <a href="#">Zhiyu Zoey Chen</a> ) Topics: Synthetic Data Generation, Post-training	Sep. 2024 - present Dallas, TX
	<b>Zoom Gen AI</b> <i>Research Intern</i> (Mentor: <a href="#">Kaiqiang Song</a> ) Topic: Complex Instruction Following	Jun. 2025 - Aug. 2025 Seattle, WA
	<b>Tencent AI Lab</b> <i>Research Intern</i> (Mentors: <a href="#">Haitao Mi</a> , <a href="#">Linfeng Song</a> ) Topics: Reinforcement Learning from Human Feedback	May. 2024 - Jul. 2024 Seattle, WA
	<b>Tencent AI Lab</b> <i>Research Intern</i> (Mentor: <a href="#">Lifeng Jin</a> ) Topics: Dialogue Understanding, Semi-supervised Learning	Dec. 2021 - Dec. 2022 Shenzhen, China
	<b>Institute of Human Language Technology at Soochow University</b> <i>Student Researcher</i> (Advisors: <a href="#">Wenliang Chen</a> , <a href="#">Xiabing Zhou</a> ) Topics: Dialogue State Tracking, Conversational Emotion Recognition	Sep. 2020 - Jul. 2021 Suzhou, China

Papers

(\*denotes equal contribution)

1. [Complex Logical Instruction Generation \(Preprint\)](#)  
**Mian Zhang**, Shujian Liu, Sixun Dong, Ming Yin, Yebowen Hu, Xun Wang, Steven Ma, Song Wang, Sathish Reddy Indurthi, Haoyun Deng, Zhiyu Zoey Chen, Kaiqiang Song
2. [HiPRAG: Hierarchical Process Rewards for Efficient Agentic Retrieval Augmented Generation \(Preprint\)](#)  
Peilin Wu, **Mian Zhang**, Kun Wang, Wentian Zhao, Kaiyu He, Xinya Du, Zhiyu Chen
3. [LiveMCP-101: Stress Testing and Diagnosing MCP-enabled Agents on Challenging Queries \(Preprint\)](#)  
Ming Yin, Dinghan Shen, Silei Xu, Jianbing Han, Sixun Dong, **Mian Zhang**, Yebowen Hu, Shujian Liu, Simin Ma, Song Wang, Sathish Reddy Indurthi, Xun Wang, Yiran Chen, Kaiqiang Song
4. [Search Wisely: Mitigating Sub-optimal Agentic Searches By Reducing Uncertainty \(EMNLP 2025\)](#)  
Peilin Wu\*, **Mian Zhang**\*, Xinlu Zhang, Xinya Du, Zhiyu Zoey Chen
5. [MMTok: Multimodal Coverage Maximization for Efficient Inference of VLMs \(Preprint\)](#)  
Sixun Dong, Juhua Hu, **Mian Zhang**, Ming Yin, Yanjie Fu, Qi Qian
6. [LMR-Bench: Evaluating LLM Agent's Ability on Reproducing Language Modeling Research \(EMNLP 2025\)](#)  
Shuo Yan, Ziming Luo, Zimu Wang, Ruochen Li, Daoyang Li, Liqiang Jing, Kaiyu He, Peilin Wu, Junlong Ni, George Michalopoulos, Yue Zhang, Ziyang Zhang, **Mian Zhang**, Zhiyu Chen, Xinya Du
7. [IDEA: Enhancing the Rule Learning Ability of Large Language Model Agent through Induction, Deduction, and Abduction \(ACL 2025\)](#)  
Kaiyu He, **Mian Zhang**, Shuo Yan, Peilin Wu, Zhiyu Zoey Chen.
8. [Preference Learning Unlocks LLMs' Psycho-Counseling Skills \(Preprint\)](#)  
**Mian Zhang**, Shaun M. Eack, Zhiyu Chen.
9. [CBT-Bench: Evaluating Large Language Models on Assisting Cognitive Behavior Therapy \(NAACL 2025\)](#)  
**Mian Zhang**\*, Xianjun Yang\*, Xinlu Zhang, Travis Labrum, Jamie C. Chiu, Shaun M. Eack, Fei Fang, William Yang Wang, Zhiyu Chen.
10. [Large Language Models for Disease Diagnosis: A Scoping Review \(npj AI 2025\)](#)  
Shuang Zhou\*, Zidu Xu\*, **Mian Zhang**\*, Chunpu Xu\*, Yawen Guo, Zaifu Zhan, Sirui Ding, Jiashuo Wang, Kaishuai Xu, Yi Fang, Liqiao Xia, Jeremy Yeung, Daochen Zha, Mingquan Lin, Rui Zhang.
11. [Inconsistent dialogue responses and how to recover from them \(EACL 2024\)](#)  
**Mian Zhang**, Lifeng Jin, Linfeng Song, Haitao Mi, Dong Yu.
12. [SafeConv: Explaining and Correcting Conversational Unsafe Behavior \(ACL 2023 Oral\)](#)  
**Mian Zhang**, Lifeng Jin, Linfeng Song, Haitao Mi, Wenliang Chen, Dong Yu.
13. [Friend-training: Learning from Different but Related Tasks \(EACL 2023\)](#)  
**Mian Zhang**, Lifeng Jin, Linfeng Song, Haitao Mi, Xiabing Zhou, Dong Yu.
14. [Emotion Recognition in Conversation from Variable-Length Context \(ICASSP 2023\)](#)  
**Mian Zhang**, Xiabing Zhou, Wenliang Chen, Min Zhang.
15. [A Pairing Enhancement Approach for Aspect Sentiment Triplet Extraction \(KSEM 2023\)](#)  
Fang Yang, **Mian Zhang**, Gongzhen Hu, Xiabing Zhou.

Skills	<i>Programming Language:</i> Python, C/C++, Shell, L <sup>A</sup> T <sub>E</sub> X, Matlab <i>Machine Learning Framework:</i> PyTorch, NumPy, Transformers, Scikit-learn <i>Tool &amp; Software:</i> Vim, Git, pdb, Matplotlib, Pandas <i>Natural Language:</i> Mandarin (native), English (advanced)
Selected Awards	Outstanding Master's Thesis 2024 Outstanding Graduate Award at Soochow University 2023 First-class Scholarship at Soochow University 2020 - 2021 Principal's Award 2019 <a href="#">CUMCM National First Prize (top 1%)</a> 2018 First-class Scholarship at NJUPT 2017 - 2019