

Education	The University of Texas at Dallas - Ph.D. in Computer Science - Advisor: Zhiyu Zoey Chen	2024 - 2027 Spring (anticipated) Dallas, TX, USA
	Virginia Tech (transferred out) - Ph.D. in Computer Science	2023 - 2024 Blacksburg, VA, USA
	Soochow University - M.S. in Computer Science - Advisors: Wenliang Chen , Xiabing Zhou - Outstanding Graduate; Outstanding Thesis	2020 - 2023 Suzhou, Jiangsu, China
	Nanjing University of Posts and Telecommunications - B.Eng. in Computer Science - GPA: 3.96 / 5 (Top 3% in the Department)	2016 - 2020 Nanjing, Jiangsu, China
Research Summary	<p>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]. Recently, I am particularly interested in developing controllable LLMs. Topics include complex instruction following [1], smart agentic search [2,4], and instruction hierarchy enforcing.</p> <p>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].</p> <p>Overall, I have published 15 papers in these directions, including 9 first-authored papers and 10 peer-reviewed publications in top-tier AI conferences.</p>	
Research Experiences	Human Language Technology Research Institute at UTD <i>Student Researcher</i> (Advisor: Zhiyu Zoey Chen) Topics: Synthetic Data Generation, Post-training	Sep. 2024 - present Dallas, TX
	Zoom Gen AI <i>Research Intern</i> (Mentor: Kaiqiang Song) Topic: Complex Instruction Following	Jun. 2025 - Aug. 2025 Seattle, WA
	Tencent AI Lab <i>Research Intern</i> (Mentors: Haitao Mi , Linfeng Song) Topics: Reinforcement Learning from Human Feedback	May. 2024 - Jul. 2024 Seattle, WA
	Tencent AI Lab <i>Research Intern</i> (Mentor: Lifeng Jin) Topics: Dialogue Understanding, Semi-supervised Learning	Dec. 2021 - Dec. 2022 Shenzhen, China
	Institute of Human Language Technology at Soochow University <i>Student Researcher</i> (Advisors: Wenliang Chen , Xiabing Zhou) 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 ^A T _E X, Matlab <i>Machine Learning Framework:</i> PyTorch, NumPy, Transformers, Scikit-learn <i>Tool & 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 CUMCM National First Prize (top 1%) 2018 First-class Scholarship at NJUPT 2017 - 2019