

JIAYI ZHANG

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EDUCATION

The Hong Kong University of Science and Technology (Guangzhou)

PhD Student, Information Hub

Renmin University of China

Bachelor, School of Information

Guangzhou, China

2024.9 - 2028.6

Beijing, China

2020.9 - 2024.6

PUBLICATIONS

1. **Jiayi Zhang***, Jinyu Xiang*, Zhaoyang Yu, Fengwei Teng, Xionghui Chen, Jiaqi Chen, Mingchen Zhuge, Xin Cheng, Sirui Hong, Jinlin Wang, Bingnan Zheng, Bang Liu, Yuyu Luo, Chenglin Wu. **AFLOW: Automating Agentic Workflow Generation**, *ICLR 2025 Oral (Top 1.8%)*, 2024.10.
2. Xinbing Liang, Jinyu Xiang, Zhaoyang Yu, **Jiayi Zhang**, Sirui Hong. **OpenManus: An open-source framework for building general AI agents**, *Github 45.2K Stars*, 2025.3.
3. Jinyu Xiang*, **Jiayi Zhang***, Zhaoyang Yu, Fengwei Teng, Jinhao Tu, Sirui Hong, Chenglin Wu, Yuyu Luo. **Self-Supervised Prompt Optimization**, *Arxiv Preprint*, 2025.2.
4. Boyan Li, **Jiayi Zhang**, Ju Fan, Yanwei Xu, Chong Chen, Nan Tang, Yuyu Luo. **Alpha-SQL: Zero-Shot Text-to-SQL using Monte Carlo Tree Search**. *Arxiv Preprint*, 2025.2.
5. Bang Liu*, Xinfeng Li*, **Jiayi Zhang***, Jinlin Wang*, ..., Peijian, Qiang Yang, Xiaoliang Qi, Chenglin Wu. **Advances and Challenges in Foundation Agents**, *Arxiv Preprint*, 2025.4.
6. Fengwei Teng, Zhaoyang Yu, Quanshi, **Jiayi Zhang**, Chenglin Wu, Yuyu Luo. **Atom of Thoughts for Markov LLM Test-Time Scaling**, *Arxiv Preprint*, 2025.2.
7. Yifan Wu, Jingze Shi, Bingheng Wu, **Jiayi Zhang**, Xiaotian Lin, Nan Tang, Yuyu Luo. **Concise Reasoning, Big Gains: Pruning Long Reasoning Trace with Difficulty-Aware Prompting**, Under Review, 2025.5.
8. Xiangru Tang, Daniel Shao, Jiwoong Sohn, Jiapeng Chen, **Jiayi Zhang**, Jinyu Xiang, ..., Arman Cohan, Mark Gerstein. **MedAgentsBench: Benchmarking Thinking Models and Agent Frameworks for Complex Medical Reasoning**, *Arxiv Preprint*, 2025.3.
9. Sirui Hong, Yizhang Lin, Bangbang Liu, Binhao Wu, Danyang Li, Jiaqi Chen, **Jiayi Zhang**, Jinlin Wang, ..., Chenglin Wu. **Data Interpreter: An LLM Agent For Data Science**, *Arxiv Preprint*, 2024.2.
10. Sirui Hong, Yutong Bian, Xinbing Liang, ..., **Jiayi Zhang**, Xiangru Tang, Chenglin Wu. **RealDevWorld: Benchmarking Production-Ready Software Engineering**, Under Review, 2025.4.
11. **Jiayi Zhang**, Chuang Zhao, Yihan Zhao, Zhaoyang Yu, Yuyu Luo, Ming He, Jianping Fan. **MobileExperts: A Dynamic Tool-Enabled Agent Team In Mobile Devices**, *Arxiv Preprint*, 2024.7.

JOB EXPERIENCE

Research Intern | DeepWisdom

Present

- Topic: Foundation Agent; LLM as World Model; Agentic Workflow Optimization.

Research Intern | AI Laboratory at Lenovo Research

Dec. 2023 - May. 2024

- Topic: LLM Based MultiAgent System; Device Operation Agent
- Based on GPT-4V, construct a framework for multi-agent collaboration to handle complex mobile tasks.

Algorithm Intern | Zhipu AI

Aug. 2023 - Dec. 2023

- Developed a 2D avatar streaming system based on SadTalker and ChatGLM, enabling interactions within 5 seconds.
- Designed Chat2Wav for TTS from LLM-texts; created Wav2Stream for 2D avatar streaming.

COMPETITIONS AND SIDE PROJECTS

MetaGPT | Core Contributor

Sep. 2023 - Present

- **Mini Hackathon | Best Contributor:** For my implementation of Stanford town in the MetaGPT Multi Environment Mini Hackathon, I was honored as the Best Contributor.
- **Android Assistant | Core Contributor:** A fellow researcher from the MetaGPT team and I have recently incorporated AndroidEnv into MG, and implemented functionality akin to AppAgent on it.

2024 Alibaba Global Mathematics Competition AI Challenge | Top 1 % (3/563) | Team Leader

Apr. 2024

- I led a team to develop the MathAI multi-agent system to tackle math problems at the Olympiad level. We made it to the finals among more than 500 teams worldwide, and the final rankings is third place.

Prompt Navigator - Baidu & FounderPark AGI Hackathon | Second Place Award | Team Leader

Dec. 2023

- As the team leader, I spearheaded the development of an open-source tool that streamlined the optimization and evaluation of prompts for generalized performance testing, incorporating advanced strategies such as COT, Contrastive, and Difficulty tailored for Zero shot and few shot scenarios.

AWS Master - AWS GenAI Talent Program | 2 out of 4 awards | Team Member

Aug. 2023

- As a team member of the AWS Master project, I contributed to interface and vector retrieval development, enabling the tool to intelligently parse user code for AWS server deployment guidance, and secured two awards in the AWS GenAI Talent Program hackathon event in August 2023.