

Weijia Zhang

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EDUCATION

Yale University

M.S. in Computer Science (Thesis Track with Full Scholarship)

University of Illinois Urbana-Champaign (UIUC)

B.S. in Computer Science and Mathematics

Aug 2026 - May 2028

Incoming Student

Aug 2022 - May 2026

GPA: 3.7/4.0 (2025 Dean's List)

WORK EXPERIENCE

Microsoft, Microsoft Research Asia (MSRA)

Research Intern

July 2025 - Sep 2025

- Worked on VLM/LLM Agent research to improve Microsoft Excel Copilot capabilities
- Built **TextAnalysisSFT** data pipeline for SFT data generation for the new TextAnalysis API in Excel Copilot: Kaggle mining (2000+ real samples) → heavy-text filtering → query & Office.js code generation → SheetEngine validation; delivered dataset improved Office Script code generation accuracy by 75%

Reborn Network

AI Engineer

May 2023 - July 2023

- Developed a **role-playing agent Unity VR Game** enabling agents interaction through text/voice/VR actions in real time (< 1s latency)
- Introduced RAG/vector database to strengthen long-term agent memory, improving dialogue coherence score from 2/5 to 4/5
- Designed a reusable "character card" framework, enabling UGC ecosystem and reducing character persona configuration time by 300%

Tencent

Software Engineer, Wechat Group

Aug 2024 - Sep 2024

- Developed a cross-platform (Android & iOS) hardware performance analysis tool for WeChat Mini Programs, supporting 200+ partner teams in identifying performance bottlenecks
- Built Unity Mono Memory Profiler that discovered 40+ hidden memory allocation points, reducing memory-leak-related crash rate by 120%

PUBLICATIONS (100+ CITATION)

Weijia Zhang, Zijia Liu, Tianyi Zhang, Ruiqi Chen, Lian Zhang, Haoru Li, Haoqi Chen, Jiaxuan You. "How Much Vision Does Multimodal Reasoning Need? Vision-Stripping for Multimodal Benchmarks" *Under review at NeurIPS 2026*

Weijia Zhang, Ruiqi Chen, Yunze Xiao, Weihao Xuan. "Every Act Has Its Price: Compressed Moral Composition in Frontier LLMs" *Under review at EMNLP 2026*

Weijia Zhang*, Zijia Liu*, Haoru Li*, Haoqi Chen*, Jiaxuan You. "SeeingEye: Agentic Information Flow Unlocks Multimodal Reasoning in Text-only LLMs." *arXiv preprint arxiv:2510.25092 Under review at EMNLP 2026*

Gordon Dai*, **Weijia Zhang***, Jinhan Li, Siqi Yang, Srihas Rao, Arthur Caetano, Misha Sra. "Artificial Leviathan: Exploring Social Evolution of LLM Agents Through the Lens of Hobbesian Social Contract Theory." *The First Workshop on AI Behavioral Science, ACM SIGKDD 2024*

Miaomiao Li, Hao Chen, Yang Wang, Tingyuan Zhu, **Weijia Zhang**, Kaijie Zhu, Kam-Fai Wong, Jindong Wang. "Understanding and Mitigating the Bias Inheritance in LLM-based Data Augmentation on Downstream Tasks." *ACL 2026. Oral*

Kunlun Zhu, Zijia Liu, Bingxuan Li, Muxin Tian, Yingxuan Yang, Jiaxun Zhang, Pengrui Han, Qipeng Xie, Fuyang Cui, **Weijia Zhang**, Xiaoteng Ma, Xiaodong Yu, Gowtham Ramesh, Jialian Wu, Zicheng Liu, Pan Lu, James Zou, Jiaxuan You. "Where LLM Agents Fail and How They Can Learn From Failures." *arXiv preprint arXiv:2509.25370*.

PROJECT EXPERIENCE

OpenManus & OpenManus-RL (Researcher, GitHub 60k+ Stars) | [GitHub](#)

Jan 2025 - Jul 2025

- Collaborated with the official OpenManus team as a core contributor to [OpenManus-RL](#), the follow-up project of OpenManus; the open-source ecosystem has accumulated 60,000+ GitHub stars
- Implemented a ReAct-style reasoning architecture (*Think* → *Act* → *Tool-use*) and multi-agent collaboration workflows; built an MCP-based tool-library framework for automated tool invocation and output processing
- Constructed high-quality SFT datasets for agent benchmarks including AlfWorld and WebShop; designed step-level reward signals to improve agent planning and memory capabilities

GUIAgentDebugger (First Author / Lead)

Jan 2026 - Present

- Designed a GUI-agent error taxonomy with 4 major categories and 29 subtypes, covering perception, interaction localization, task reasoning, and external system failures across mainstream OSWorld/CUA scenarios
- Built a self-evolving VLM-agent debugging framework that automatically identifies root causes from failed trajectories, distills them into reusable debugging skills, and enables agents to learn autonomously from historical failures
- Designed a dual-layer memory architecture with episodic and semantic memory, together with an intent-aware RAG retrieval mechanism that injects skills from similar-intent trajectories to improve diagnosis and re-rollout accuracy

ACTIVITIES & AWARDS

C.W. Gear Outstanding Undergraduate Student (2 people per year)

May 2026

UIUC Dean's List

2025

RecSys 2025 Reviewer

Aug 2025

UIUC MechMania 28 AI Hackathon — 2nd Place

Sep 2022

SKILLS

Programming Languages: Python, C/C++, C#, Java, JavaScript/TypeScript, HTML/CSS, SQL, Rust

Frameworks & Libraries: VERL, VLLM, LangGraph, LangChain, PyTorch, Tensorflow

AI Focus: SFT, Reinforcement Learning, Post-training, RAG, Agentic Agent, Machine Learning, Generative AI