

Weijia Zhang

2172003915 | zhangwj.charlie@gmail.com | [linkedin.com/in/weijia-charlie-zhang](https://www.linkedin.com/in/weijia-charlie-zhang) | [charliedreemur.github.io](https://github.com/charliedreemur) | [Google Scholar](https://scholar.google.com/citations?user=2172003915)

EDUCATION

Yale University

M.S. in Computer Science, Thesis Track with Full Scholarship | Incoming Student

Aug 2026 - May 2028

University of Illinois Urbana-Champaign (UIUC)

B.S. in Computer Science and Mathematics | GPA: 3.7/4.0; Dean's List 2025

Aug 2022 - May 2026

WORK EXPERIENCE

Microsoft Research Asia (MSRA)

Research Intern

- Conducted VLM/LLM agent research for Excel Copilot, focusing on spreadsheet text-analysis workflows and Office.js code generation for the TextAnalysis API.
- Built a TextAnalysisSFT data-generation pipeline: mined 2,000+ Kaggle spreadsheet samples, filtered heavy-text sheets, generated query/Office.js pairs, and validated outputs with SheetEngine; internal validation reported a 75% relative improvement in Office Script code-generation accuracy.

July 2025 - Sep 2025

Reborn Network

AI Engineer

- Developed a Unity VR role-playing agent game with real-time text, voice, and VR-action interaction under a sub-second latency target.
- Added RAG/vector-store memory for persistent character context, improving human-rated dialogue coherence from 2/5 to 4/5.
- Designed a reusable character-card schema for UGC personas, cutting persona setup effort by roughly 3x.

May 2023 - July 2023

Tencent, WeChat Group

Software Engineer

- Built a cross-platform Android/iOS performance analysis tool for WeChat Mini Programs, helping 200+ partner teams diagnose hardware bottlenecks.
- Implemented a Unity Mono memory profiler and allocation tracing workflow; identified 40+ hidden allocation sites and supported memory-leak crash investigation.

Aug 2024 - Sep 2024

SELECTED PUBLICATIONS

- **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, 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." AI Behavioral Science Workshop, 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**, et al. "Where LLM Agents Fail and How They Can Learn From Failures." arXiv preprint.

RESEARCH PROJECTS

CUADebug / GUIAgentDebugger

First Author / Lead

- Designed a CUA root-cause taxonomy with 4 top-level modules and 29 subtypes covering perception, grounding/interaction, reasoning/control, and external/system failures.
- Built CUAErrorBench from 184 human-annotated OSWorld failure trajectories across Claude, Gemini, and Qwen agents, with labels for root step, subtype, evidence, correction, and confidence.
- Developed a tool-augmented RCA debugger that inspects paired before/after screenshots, action traces, and execution status, then submits structured root-cause evidence and repair recipes.
- Added episodic-memory retrieval for reusable debugging lessons; in continual re-rollout experiments, improved success from 12.20% direct continuation to 25.86%, approaching 29.21% with human RCA.

Jan 2026 - Present

OpenManus & OpenManus-RL

Researcher / Core Contributor

- Collaborated with the official OpenManus team on OpenManus-RL, the follow-up to the 60k+ star OpenManus open-source agent ecosystem.
- Implemented ReAct-style reasoning and multi-agent collaboration workflows, including an MCP-based tool-library interface for automated tool invocation and output handling.
- Built SFT data and step-level reward signals for AlfWorld and WebShop agent benchmarks to support planning and memory experiments.

Jan 2025 - July 2025

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

Frameworks: VERL, vLLM, LangGraph, LangChain, PyTorch, TensorFlow

AI Focus: LLM Agents, Multimodal Reasoning, SFT, RL/Post-training, RAG, Evaluation