

Jiayu (Mila) Wang

✉ milawang@cs.wisc.edu

☎ +1 412-403-7989

🌐 jiayu-mila-wang

🐙 github.com/jiayuwu

🌐 https://jiayuwu.github.io

🎓 Google Scholar

📍 1205 University Avenue, Office 6548, Madison, WI 53706

Education

- Jun 2024 – Aug 2026 📖 **University of Wisconsin-Madison**, Madison, WI, USA
Ph.D. in Computer Sciences; GPA: 4.00
Advisors: Aws Albarghouthi and Fred Sala
- Aug 2022 – May 2024 📖 **University of Wisconsin-Madison**, Madison, WI, USA
M.S. in Economics; GPA: 3.95
- Sep 2018 – Jul 2021 📖 **Peking University**, Beijing, China
- Sep 2017 – Jun 2021 📖 **Beijing Foreign Studies University**, Beijing, China
Honors: National Scholarship (Top 1%); National Excellence Community Volunteer Student (Top 0.01%)

Research Interests

- 📖 LLM Agent and Multi-Agent System; Self-Evolving Agent; Post-Training and Inference Scaling of LLM

Industry Experience

- May 2026 – Present 📖 Research Scientist Intern, Meta FAIR, Menlo Park, CA, USA
- Robustness of MLLM-based agents across diverse settings, including command line, computer use, general-purpose tool use, and deep research.
- Jun 2025 – May 2026 📖 Research Intern, Salesforce AI Research, Palo Alto, CA, USA
- Developed SkillOrchestra, a highly efficient agent orchestration system that routes agents via skill estimation, transferred successfully to production and now serving millions of users (highlighted at Salesforce TDX 2026).
 - Developed SparkleRL (NeurIPS 2025), a reinforcement learning framework that controls training difficulty by providing auxiliary information as scaffolding during RL optimization.
 - Developed LiveResearchBench (ICLR 2026), a live benchmark with novel evaluation protocols for complex, real-world deep research tasks, accompanied by a multi-agent system for automated research.

Publications

- [1] **Jiayu Wang**, Yifei Ming, Zixuan Ke, Shafiq Joty, Aws Albarghouthi, and Frederic Sala. “SkillOrchestra: Learning to Route Agents via Skill Transfer.” *arXiv:2602.19672*, 2026. 🐙 Code 📖 Agents · Multi-Agent Systems · Harness
- [2] **Jiayu Wang**, Yifei Ming, Riya Dulepet, Qinglin Chen, Austin Xu, Zixuan Ke, Frederic Sala, Aws Albarghouthi, Caiming Xiong, and Shafiq Joty. “LiveResearchBench: A Live Benchmark for User-Centric Deep Research in the Wild.” In *International Conference on Learning Representations (ICLR)*, 2026. 📄 Paper 🐙 Code 📖 Agents · Deep Research · Evaluation

Publications (continued)

- [3] Zixuan Ke, Yifei Ming, Austin Xu, Ryan Chin, Xuan-Phi Nguyen, Prathyusha Jwalapuram, **Jiayu Wang**, Semih Yavuz, Caiming Xiong, and Shafiq Joty. “MAS-Orchestra: Understanding and Improving Multi-Agent Reasoning Through Holistic Orchestration and Controlled Benchmarks.” In *International Conference on Machine Learning (ICML)*, 2026.  [Paper](#)  [Code](#)  [Multi-Agent Systems](#)
- [4] **Jiayu Wang**, Yifei Ming, Zixuan Ke, Caiming Xiong, Shafiq Joty, Aws Albarghouthi, and Frederic Sala. “Beyond Accuracy: Dissecting Mathematical Reasoning for LLMs Under Reinforcement Learning.” In *Neural Information Processing Systems (NeurIPS)*, 2025.  [Paper](#)  [Code](#)  [RL](#)
- [5] **Jiayu Wang**, Aws Albarghouthi, and Frederic Sala. “COSMOS: Predictable and Cost-Effective Adaptation of LLMs.” *arXiv:2505.01449*, 2025.  [Scaling Law](#)
- [6] **Jiayu Wang**, Yifei Ming, Zhenmei Shi, Vibhav Vineet, Xin Wang, Yixuan Li, and Neel Joshi. “Is A Picture Worth A Thousand Words? Delving Into Spatial Reasoning for Vision Language Models.” In *Neural Information Processing Systems (NeurIPS)*, 2024.  [Paper](#)  [Code](#)  [Multimodality](#) · [Synthetic Data](#) · [Evaluation](#)
- [7] **Jiayu Wang***, Kanghee Park*, Taylor Berg-Kirkpatrick, Nadia Polikarpova, and Loris D’Antoni. “Grammar-Aligned Decoding.” In *Neural Information Processing Systems (NeurIPS)*, 2024.  [Paper](#)  [Code](#)  [Decoding](#) · [Safety](#) · [Robustness](#)
- [8] Shrey Pandit, Xuan-Phi Nguyen, Yifei Ming, Austin Xu, **Jiayu Wang**, Caiming Xiong, and Shafiq Joty. “Synthesizing Agentic Data for Web Agents with Progressive Difficulty Enhancement Mechanisms.” *arXiv:2510.13913*, 2025.  [Agents](#) · [Synthetic Data](#)
- [9] Yifei Ming, Zixuan Ke, Xuan-Phi Nguyen, **Jiayu Wang**, and Shafiq Joty. “Helpful Agent Meets Deceptive Judge: Understanding Vulnerabilities in Agentic Workflows.” *arXiv:2506.03332*, 2025.  [Safety](#) · [Robustness](#)

Invited Talks

Aug 2026	 Meta FAIR <i>BrittleAgent: Evaluating Agent Robustness Beyond Clean Benchmarks</i>
Jun 2026	 Meta AI <i>SkillOrchestra: Learning to Route Agents via Skill Transfer</i>
Apr 2026	 Datadog AI Research <i>Towards Efficient and Intelligent Agentic Systems</i>
Feb 2026	 University of Wisconsin-Madison <i>Multi-Agent Orchestration for Long-Horizon Tasks</i>
Aug 2025	 Salesforce AI Research <i>Multi-Agent Systems for Complex Enterprise Research Tasks</i>
Apr 2025	 MadPL Seminar, University of Wisconsin-Madison <i>Automated Post-Training Development of Large Language Models</i>
Sep 2024	 Microsoft Research <i>Spatial Reasoning in Vision-Language Models</i>

Skills

Technical Skills	 Python, PyTorch, vLLM, SGLang, Ray, DeepSpeed, LangChain, LangGraph, Claude Code, FastAPI, Docker, Kubernetes, Linux, Git, Bash
Languages	 Mandarin (native), English (fluent), Laotian (fluent), and Thai (basic)
Academic Service	 Program Committee/Area Chair for ICLR, NeurIPS, ICML, ARR (2024 – 2026)
Interests	 Tennis (National Level II Athlete, China), Pipa, Hiking, Chinese Dance, Classical Guitar