Kunlun Zhu

✉ kunlunz2@illinois.edu | ⓞ github | ✉ Scholar | ⌂ Personal-Web

Education

Sun Yat-Sen University (SYSU)	Aug 2015 - July 2020

B.E in Computer Science, Overall GPA: 3.8/5.0, WES Major GPA: 3.82/4.0

University of Illinois Urbana Chanpaign (UIUC)	Aug 2024 - May 2026

Master of Science in Computer Science (MSCS)

TOEFL-best: 111 (Reading: 29, Listening: 28, Speaking: 26, Writing: 28), GRE: (V:154, Q:170, AW:3.5)

Experience

UIUC | Prof. Jiaxuan You | Master Student, remote internship   Dec.2023 - Present

- Co-First author in a survey about Artificial General Intelligence and help host and summarize the ICLR 2024 'How far are we from AGI workshop'.
- ResearchTown Project: a multi-agent system for scientific research, helping in the dataset construction, ethical issues and paper generation.

ModelBest & Thunlp | Prof. Zhiyuan Liu | Research Assistant & NLP Engineer   Feb 2022 - August 2024

- First author in RAGEval: a scenario Specific RAG Evaluation Dataset Generation FrameWork.
- Member of the Tsinghua's '清小搭' team: the first Tsinghua Undergraduate student AI companion assistant, took part in the data collection and evaluation process.
- Team of the 'MiniCPM-RAG,' a small language model with comparable performance to gpt4-o in RAG problems, participate in the fine-tuning and the evaluation process
- *Toolllm* : A tool learning benchmark with 16,000+ real world APIs tool using and a tool using LLM called Toolllm and a tool retrieval system, accepted as ICLR 2024 spotlight, in charge of the dataset generation and the tool retrieval modules
- Participate in Open-source projects such as BMTools, XAgent, Agentverse, ChatDev, gaining over 10,000 stars in github in total
- First author or one of the main authors in 6 research papers about LLMs and their applications, having over 550 citations in total.

Mila-Quebec AI Institute & Biogeometry Inc | Prof. Jian Tang | Research Assistant   July 2023 - December 2023

- Developed *DrugAgent*: A LLM-based RAG pipeline for drug discovery from scientific research papers and databases.
- Forming multi-agents into a structure akin to social networks for improved simulation and task-solving capabilities.
- One position paper about scientific agent published at ICLR workshop.

Massachusetts Institute of Technology | Prof. Munther Dahleh | Online Workshop Student   June 2022 - July 2022

- Measured the lockdown policy effectiveness using Network modeling methods such as SEIR model network.
- Designed a network decision-making model for covid-19 prevention with network clustering and centrality algorithm.

Carneigie Mellon University, Robotics Institute | Prof. Katia Sycara | Research Intern   July 2018 - July 2019

- Proposed an enhanced object saliency map for interpretability of Deep reinforcement learning in Atari Games.
- Applied Influence function Method to analyze its training data for the overall importance during the training process.

Publications & Preprints

1. (*Preprint*) "RAGEval: Scenario Specific RAG Evaluation Dataset Generation Framework."*K.Zhu*, Y. Luo, D. Xu, R. Wang, S. Yu, S. Wang, Y. Yan, Z. Liu, X. Han, Z. Liu, and M. Sun. *preprint* : *arXiv* : 2408.01262, 2024.

2. (*ACL* : 2023) "WebCPM: Interactive Web Search for Chinese Long-form Question Answering." Y. Qin, Z. Cai, D. Jin, L. Yan, S. Liang, *K.Zhu*, Y. Lin, X. Han, N. Ding, H. Wang, et al. In Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics, vol. 1, pp. 8968-8988, 2023. 50+ citations

3. (*ICLR* : 2024 *spotlight*) "Toolllm: Facilitating large language models to master 16000+ real-world apis." Y. Qin*, S. Liang*, Y. Ye, *K.Zhu*, L. Yan, Y. Lu, Y. Lin, X. Cong, et al. *preprint* : *arXiv* : 2307.16789, 2023. 300+ citations

4. (*TMLR* : 2024) "Exploring format consistency for instruction tuning." S. Liang*, R. Tian*, *K.Zhu**, Y. Qin, H. Wang, X. Cong, Z. Liu, X. Liu, M. Sun. Transactions on Machine Learning Research, 2023.

5. (Preprint) "QASnowball: An Iterative Bootstrapping Framework for High-Quality Question-Answering Data Generation." *K.Zhu*, S. Liang, X. Han, Z. Zheng, G. Zeng, Z. Liu, M. Sun. *preprint* : *arXiv* : 2309.10326, 2023.

6. (*ICLR* : *LLM* − *agents* : *workshop*) "Prioritizing Safeguarding Over Autonomy: Risks of LLM Agents for Science" X. Tang*, Q. Jin*, *K.* : *Zhu*, T. Yuan, Y. Zhang*, W. Zhou, M. Qu, Y. Zhao, J. Tang, Z. Zhang, A. Cohan, Z. Lu, M. Gerstein *preprint* : *arXiv* : 2402.04247, 2024.

7. (*Under Review at EMNLP* 2025) "Scaling Large-Language-Model-based Multi-Agent Collaboration", C. Qian, Z. Xie, Y. Wang, W. Liu, *K.Zhu**, Y. Dang, Z. Du, W. Chen, C. Yang, Zhiyuan Liu, Maosong Sun. *preprint arXiv* : 2406.07155, 2024.

8. (*Under Review at TMLR*) "How Far Are We From AGI", T. Feng, *K.Zhu**, C. Jin, J. Liu, H. Tu, Z. Cheng, G. Lin, J. You. *preprint* : *arXiv* : 2405.10313, 2024.

9. (*Under Review at ACM Digitals*) "Tool learning with foundation models." Y. Qin, S. Hu, Y. Lin, W. Chen, N. Ding, G. Cui, Z. Zeng, Y. Huang, C. Xiao, C. Han, et al. *preprint* : *arXiv* : 2304.08354, 2023. 130+ citations

Participated OpenSource Projects

- *ToolBench* Benchmark for 16,000+ tool using, github 4,000+ stars
- *XAgent* State-of-the-art autonomous agent, github 7,000+ stars
- *AgentVerse* multi-agent simulation and task solving framework, github 3,300+ stars
- *WebCPM* Chinese websearch agent project, github 900+ stars
- *ChatDEV* A multi-agent collaboration framework for software development, github 24,400+ stars
- *ResearchTown* A multi-agent platform for simulating and studying automatic AI research

Awards & Honors

- Silver Medal in Kaggle 'Feedback Prize' NLP Competition over 1557 teams (top 2.5%)
- 2019 Top 5 teams in Amazon Alexa Hackathon workshop at Carnegie Mellon University
- 2017&2018 Out-standing Student Member Award and scholarships of CS Department, Sun Yat-Sen University

Service

- ICLR 2025 reviewer
- ICLR 2024, "How far are we from AGI" and "LLM agent" workshop reviewer
- ACL 2024 "Word Play" workshop reviewer
- NeurIPS 2025 main conference reviewer
- ACL ARR 2024 June Reviewer
- Teaching Assistant at CS107 Data Science Discovery UIUC

Main Interests and Skills

- Interests: Large Language Model Tuning and its application, LLM-agent, Retrieval Augmented Generation
- Skills: Pytorch, huggingface transformer, langchain, llama_index