

Xiao Liang

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Education

University of California, Los Angeles (UCLA) Sep. 2025 - Present

Ph.D | Advisor: [Kai-Wei Chang](#), [Ying Nian Wu](#)

Tsinghua University (THU) Sep. 2022 - Jun. 2025

M.Sc. | *Data Science and Information Technology*

Sun Yat-sen University (SYSU) Sep. 2018 - Jun. 2022

B.Sc. | *Electronic Information Science and Technology*

Employment & Experience

Microsoft AI Superintelligence Jun. 2026 - Sep. 2026

Mentor: [Dr. Yeyun Gong](#), [Dr. Paul Mineiro](#), [Dr. Weizhu Chen](#)

- Self-improving coding agents by generating more compact, higher-quality trajectories.

Microsoft Research & CoreAI Nov. 2023 - May 2026

Mentor: [Dr. Yeyun Gong](#), [Dr. Yelong Shen](#), [Dr. Weizhu Chen](#)

- Pre-training and continual learning for large language models (LLMs).
- Data-centric reinforcement learning for enhancing LLM reasoning.

Tencent Artificial Intelligence Lab (AI Lab, NLP) Mar. 2023 - Sep. 2023

Mentor: [Dr. Pengyu Cheng](#) Shenzhen, China

- Utilizing reinforcement learning for long sequence modeling in Transformers.
- Dialog generation and task-specific instruction data generation.

Selected Publications

- [1] **Xiao Liang***, Zhong-Zhi Li*, Yeyun Gong, Yelong Shen, Ying Nian Wu, Zhijiang Guo, Weizhu Chen. *Beyond Pass@1: Self-Play With Variational Problem Synthesis Sustains RLVR*. **ICLR 2026**. [\[Paper\]](#) [\[Code\]](#) [\[Page\]](#)
- [2] **Xiao Liang***, Zhong-Zhi Li*, Yeyun Gong, Yang Wang, Hengyuan Zhang, Yelong Shen, Ying Nian Wu, Weizhu Chen. *SwS: Self-aware Weakness-driven Problem Synthesis in Reinforcement Learning for LLM Reasoning*. **NeurIPS 2025**. [\[Paper\]](#) [\[Code\]](#) [\[Page\]](#)
- [3] **Xiao Liang**, Zhong-Zhi Li, Zhenghao Lin, Eric Hancheng Jiang, Hengyuan Zhang, Yelong Shen, Kai-Wei Chang, Ying Nian Wu, Yeyun Gong, Weizhu Chen. *Training LLMs for Divide-and-Conquer Reasoning Elevates Test-Time Scalability*. **ACL 2026 Main**. [\[Paper\]](#) [\[Code\]](#)
- [4] **Xiao Liang***, Xinyu Hu*, Simiao Zuo, Yeyun Gong, Qiang Lou, Yi Liu, Shao-Lun Huang, Jian Jiao. *Task Oriented In-Domain Data Augmentation*. **EMNLP 2024 Main**. [\[Paper\]](#)
- [5] Zhong-Zhi Li*, **Xiao Liang***, Zihao Tang, Lei Ji, Peijie Wang, Haotian Xu, Xing W, Haizhen Huang, Weiwei Deng, Yeyun Gong, Ying Nian Wu, Zhijiang Guo, Xiao Liu, Fei Yin, Cheng-Lin Liu.

TL;DR: Too Long, Do Re-weighting for Efficient LLM Reasoning Compression. **ACL 2026 Main.**
[\[Paper\]](#) [\[Code\]](#)

- [6] Yi Cheng, **Xiao Liang**, Yeyun Gong, Wen Xiao, Song Wang, Yuji Zhang, Wenjun Hou, Kaishuai Xu, Wenge Liu, Wenjie Li, Jian Jiao, Qi Chen, Peng Cheng, Wayne Xiong. *Integrative Decoding: Improve Factuality via Implicit Self-consistency.* **ICLR 2025.** [\[Paper\]](#) [\[Code\]](#)
- [7] Jiawen Xie, Pengyu Cheng, **Xiao Liang**, Yong Dai, Nan Du. *Chunk, Align, Select: A Simple Long-sequence Processing Method for Transformers.* **ACL 2024 Main.** [\[Paper\]](#) [\[Code\]](#)

(* equal contribution; see my [Google Scholar](#) profile for the full list)

Awards and Honors

- Graduate Dean’s Scholar Award (GDSA) of UCLA, Amount: \$14,500. *Sep. 2025*
- Outstanding Master Graduate Thesis of Tsinghua University. *May 2025*
- Second Prize Scholarship of Tsinghua University (top 10%). *2023 - 2024*
- Outstanding Graduate Thesis of Sun Yat-sen University (top 5%). *Jun. 2022*
- Outstanding Graduate Student of Sun Yat-sen University (top 10%). *Jun. 2022*
- Second Prize Scholarship of Sun Yat-sen University (top 15%) for 3 times. *2019 - 2022*

Skills

Programming Languages: Python | Shell | LATEX | C++/C | Claude Code | Codex

Programming Tools: Git | PyTorch | Docker | Linux Ops | Vim

English Skills: Toefl 102