Xiao Liang



Education

Tsinghua University (THU) | GPA: 3.98/4.0

M.Sc. | Data Science and Information Technology

Sept. 2022 - Present Beijing, China

Sun Yat-sen University (SYSU) | GPA: 4.11/5.0

B.Sc. | Electronic Information Science and Technology

Sept. 2018 - June. 2022 Guangzhou, China

Publications

Language Modeling

- [1] Xiao Liang, Xinyu Hu, Simiao Zuo, Jimi He, Yu Wang, Victor Ye Dong, Yeyun Gong, Kushal S. Dave, Yi Liu, Qiang Lou, Shao-Lun Huang, Jian Jiao. What You See Is What You Get: Entity-Aware Summarization for Reliable Sponsored Search. In NeurIPS SafeGenAi 2024. [Paper]
- [2] 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. in ICLR 2025. [Paper] [Code]
- [3] Xiao Liang*, Xinyu Hu*, Simiao Zuo, Yeyun Gong, Qiang Lou, Yi Liu, Shao-Lun Huang, Jian Jiao. Task Oriented In-Domain Data Augmentation. In EMNLP Main 2024. [Paper]
- [4] Jiawen Xie, Pengyu Cheng, Xiao Liang, Yong Dai, Nan Du. Chunk, Align, Select: A Simple Long-sequence Processing Method for Transformers. In ACL 2024. [Paper] [Code]
- [5] Tao Shi*, Xiao Liang*, Yaoyuan Liang, Xinyi Tong, Shao-Lun Huang. SSLCL: An Efficient Model-Agnostic Supervised Contrastive Learning Framework for Emotion Recognition in Conversations. Preprint 2023. [Paper] [Code]
- [6] Yiyao Yu, Yuxiang Zhang, Dongdong Zhang, Xiao Liang, Hengyuan Zhang, Xingxing Zhang, Ziyi Yang, Mahmoud Khademi, Hany Awadalla, Junjie Wang, Yujiu Yang, Furu Wei Chain-of-Reasoning: Towards Unified Mathematical Reasoning in Large Language Models via a Multi-Paradigm Perspective. Preprint 2025. [Paper]
- [7] Microsoft Sigma Team. SIGMA: Differential Rescaling Of Query, Key And Value For Efficient Lanquage Models Microsoft Research Asia Artificial Intelligence Reasoning Group. Preprint 2025. [Paper]

Multimodal Learning

- [8] Xiao Liang*, Tao Shi*, Yaoyuan Liang, Te Tao, Shao-Lun Huang. Exploring Iterative Refinement with Diffusion Models for Video Grounding. In ICME 2024. [Paper] [Code]
- [9] Yaoyuan Liang*, Xiao Liang*, Yansong Tang, Zhao Yang, Ziran Li, Jingang Wang, Wenbo Ding, Shao-Lun Huang. CoSTA: End-to-End Comprehensive Space-Time Entanglement for Spatio-Temporal Video Grounding. In AAAI 2024. [Paper]
- [10] Yaoyuan Liang, Zhuojun Cai, Jian Xu, Guanbo Huang, Yiran Wang, Xiao Liang, Jiahao Liu, Ziran Li, Jingang Wang, Shao-Lun Huang. Unleash Region Understanding in Intermediate Layers for MLLM-based Referring Expression Generation. In NeurIPS 2024. [Paper] [Code]

(* indicates equal contribution)

Professional Experience

Microsoft Research Asia (MSR Asia)

Nov. 2023 - Present

Mentor:Dr. Yeyun Gong, Dr. Weizhu Chen,

Beijing, China

- Pre-training and continual learning for large language models (LLMs).
- Reinforcement learning to enhance reasoning in LLMs.

Tencent Artificial Intelligence Lab (AI Lab, NLP)

Mar. 2023 - Sep. 2023

Mentor: Dr. Pengyu Cheng, Dr. Nan Du

Shenzhen, China

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

Awards and Honors

• 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 | MATLAB | Shell | LATEX | C++/C | HTML

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

English Skills: Toefl 102

Academic Services

Reviewer of:

- The Conference on Empirical Methods in Natural Language Processing (EMNLP) {24}
- The IEEE International Conference on Multimedia and Expo (ICME) {24}
- The IEEE International Conference on Automatic Face and Gesture Recognition (FG) {23, 24}