Ming Li

Personal Page | Google Scholar | Semantic Scholar | Github | minglii@umd.edu

Education

University of Maryland — Maryland, US
Ph.D. in Computer Science, Supervisor: Prof. Tianyi Zhou — *Aug. 2023 – present*

Texas A&M University — Texas, US
M.S. in Computer Science, Supervisor: Prof. Ruihong Huang — *Sep. 2021 – May 2023*

Xi'an Jiaotong University — Xi'an, China
B.S. in Computer Science — *Aug. 2016 – June 2020*

Research & Internship experience

Amazon – *Applied Scientist Internship* — *May 2025 – present, San Jose, US*
- Reinforcement learning on multi-turn conversation optimization for LLMs

Microsoft – *Research Internship* — *Feb. 2025 – May 2025, remote, US*
- Interpretability and efficient collaborative decoding systems for LLMs

Adobe – *Research Scientist/Engineer Internship* — *May 2024 – Nov. 2024, San Jose, US*
- Visual grounding and instruction fine-tuning for Multimodal LLMs

Ping An Technology – *Research Internship* — *May 2023 – Aug. 2023, Shenzhen, China*
- Automatic data selection for instruction tuning on LLMs
- Black-Box LLMs for Retrieval Question Answering

SIAT, Chinese Academy of Science – *Research Assistant* — *Jun. 2019 – Jun. 2021, Shenzhen, China*
- Supervisor: Prof. Yu Qiao
- Focus: Computer Vision, Scene Text Recognition and Text Detection

Selected Publications

[1] **Ming Li**, Yanhong Li, Tianyi Zhou. **What Happened in LLMs Layers when Trained for Fast vs. Slow Thinking: A Gradient Perspective.** [ACL'25 Oral]
[2] **Ming Li**, Pei Chen, Chenguang Wang, Hongyu Zhao, Yijun Liang, Yupeng Hou, Fuxiao Liu, Tianyi Zhou. **Mosaic-IT: Free Compositional Data Augmentation Improves Instruction Tuning.** [ACL'25]
[3] Zhixun Chen*, **Ming Li***, Yuxuan Huang, Yali Du, Meng Fang, Tianyi Zhou. **ATLaS: Agent Tuning via Learning Critical Steps.** [ACL'25]
[4] **Ming Li**, Han Chen, Chenguang Wang, Dang Nguyen, Dianqi Li, Tianyi Zhou. **Ruler: Improving llm controllability by rule-based data recycling.** [NAACL'25]
[5] Hongyu Zhao, Ming Li, Lichao Sun, Tianyi Zhou. **BenTo: Benchmark Task Reduction with In-Context Transferability.** [ICLR'25]
[6] **Ming Li**, Yong Zhang, Shwai He, Zhitao Li, Hongyu Zhao, Jianzong Wang, Ning Cheng, Tianyi Zhou. **Superfiltering: Weak-to-Strong Data Filtering for Fast Instruction-Tuning.** [ACL'24]
[7] **Ming Li**, Lichang Chen, Jiuhai Chen, Shwai He, Jiuxiang Gu, Tianyi Zhou. **Selective Reflection-Tuning: Student-Selected Data Recycling for LLM Instruction-Tuning.** [ACL'24]
[8] **Ming Li**, Jiuhai Chen, Lichang Chen, Tianyi Zhou. **Can LLMs Speak For Diverse People? Tuning LLMs via Debate to Generate Controllable Controversial Statements.** [ACL'24]
[9] **Ming Li**, Yong Zhang, Zhitao Li, Jiuhai Chen, Lichang Chen, Ning Cheng, Jianzong Wang, Tianyi Zhou, Jing Xiao. **From Quantity to Quality: Boosting LLM Performance with Self-Guided Data Selection for Instruction Tuning.** [NAACL'24]
[10] Haoyan Yang, Zhitao Li, Yong Zhang, Jianzong Wang, Ning Cheng, **Ming Li**, Jing Xiao. **PRCA: Fitting Black-Box Large Language Models for Retrieval Question Answering via Pluggable Reward-Driven Contextual Adapter.** [EMNLP'23]
[11] **Ming Li**, Bin Fu, Han Chen, Junjun He, Yu Qiao. **Dual relation network for scene text recognition.** [IEEE Transactions on Multimedia]
[12] **Ming Li**, Bin Fu, Zhengfu Zhang, Yu Qiao. **Character-aware sampling and rectification for scene text recognition.** [IEEE Transactions on Multimedia]

Professional Service

Area Chair: EMNLP'25 **Reviewer**: ACL, EMNLP, NAACL, ICLR, ICML, NeurIPS