Mingxin Li

Ph.D. Student
School of Computer Science, Nanjing University

Email: mingxinli@smail.nju.edu.cn
mingxinli.cs@gmail.com
Homepage: https://mingxin.site

Research Interests

Systems and networking, Infrastructure for LLMs and agents, eBPF

Education

Nanjing University Sept. 2022 – Present
Ph.D. Candidate in Computer Science and Technology
Advisor: Prof. Guihai Chen

Harbin Institute of Technology Sept. 2018 – Jun. 2022
B.E. in Software Engineering
Advisor: Assoc. Prof. Xuefeng Piao

Working Experience

Alibaba Cloud Jul. 2025 – Present
Intern, Research Team, Cloud Network

Harbin Institute of Technology Jan. 2020 – Jun. 2022
Research Assistant, Blockchain Research Group, Faculty of Computing

Publications

Scaling LLM Agent Tool Access: The MCP Gateway
Mingxin Li, *Enge Song, Yueshang Zuo, Xiaodong Liu, Rong Wen, Qiang Fu, Gianni Antichi, Jian He, Jing Tie, Zhou Shao, Xiaobo Xue, Xiong Xiao, Luyao Zhong, Shaokai Zhang, Jiangu Zhao, Jianyuan Lu, Shize Zhang, Xiaoqing Sun, Changgang Zheng, Zihao Fan, Haonan Li, Tian Pan, Xiaomin Wu, Yang Song, Xing Li, Biao Lyu, Meng Li, Haipeng Dai, Guihai Chen, Shunmin Zhu.*
The 2026 ACM SIGOPS Annual Technical Conference (**ATC'26**).

Rethinking MoE Routing for Commodity GPUs (Poster)
Meng Li, Siyuan Tong, ***Mingxin Li****, Qingkai Meng, Xiaoliang Wang, Haipeng Dai.*
The 10th Asia-Pacific Workshop on Networking (**APNet'26**).

Single-Core Hotspots on Your VNF? Break Them Up!
Changgang Zheng, Bowen Yang, Jin Ke, Ye Yang, Enge Song, Haonan Li, Zihao Fan, ***Mingxin Li****, Yilong Lv, Yisong Qiao, Jun Liang, Donglin Lai, Bengbeng Xue, Yang Song, Xing Li, Rong Wen, Zhigang Zong, Shunmin Zhu.*
The 10th Asia-Pacific Workshop on Networking (**APNet'26**).

CStar Gateway: Augmenting Public Cloud Infrastructure for Heterogeneous Network Function Virtualization
Haonan Li, Tian Pan, Jin Ke, Baohai Hu, Changgang Zheng, Enge Song, Zhi Xu, Ye Yang, Bowen Yang, Donglin Lai, Yisong Qiao, Bengbeng Xue, Jianyuan Lu, Xiaoqing Sun, Shize Zhang, Zihao Fan, ***Mingxin Li****, Yang Song, Jun Liang, Xionglie Wei, Biao Lyu, Rong Wen, Zhigang Zong, Jiao Zhang, Tao Huang, Shunmin Zhu.*
The 23rd USENIX Symposium on Networked Systems Design and Implementation (**NSDI'26**).

Bifrost: Alibaba's Next-Generation VPC Network with High-Performance Multipath Reliable Transport
Zihao Fan, Xing Li, Ye Yang, Bo Jiang, Bowen Yang, Yilong Lv, Yuke Hong, Yinian Zhou, Junnan Cai, Jiayue Xu, Yunrui Hu, Zhao Gao, Ke Sun, Yimin Liu, Xiangdong Zhang, Enge Song, Jianyuan Lu, Xiaoqing Sun, Shize Zhang, Haonan Li, ***Mingxin Li****, Changgang Zheng, Yang Song, Jun Liang, Biao Lyu, Rong Wen, Zhigang Zong, Shunmin Zhu.*
The 23rd USENIX Symposium on Networked Systems Design and Implementation (**NSDI'26**).

A Survey of Multi-Dimensional Indexes: Past and Future Trends
***Mingxin Li**, Hancheng Wang, Haipeng Dai, Meng Li, Chengliang Chai, Rong Gu, Feng Chen, Zhiyuan Chen, Shuaituan Li, Qizhi Liu, Guihai Chen.*
IEEE Transactions on Knowledge and Data Engineering (**TKDE**). Aug. 2024.

Latency Analysis for Raft Consensus on Hyperledger Fabric
*Xuefeng Piao, **Mingxin Li**, Fanchao Meng, Huihui Song.*
The 4th International Conference on Blockchain and Trustworthy Systems (**BlockSys'22**).

Teaching Experience

Teaching Assistant, *Introduction to Databases*, Nanjing University — Fall 2024
Teaching Assistant, *Distributed Networks*, Nanjing University — Fall 2023

Awards and Grants

Postgraduate Research & Practice Innovation Program (PI) — 2025
Outstanding Graduate Student Award — 2024
Jiangsu Financial Leasing Scholarship — 2024
President's Special Scholarship — 2022
Outstanding Student Scholarship — 2019, 2020, 2021
National Scholarship (Top 0.2%) — 2019