

Yifan Lu

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Research Interest

LLM, and data-centric machine learning

Education

Rice University, TX, USA

Aug 2021 – Dec 2024

B.S. in Computer Science, B.A. in Mathematics

GPA: 3.81 / 4.0

Publications

MQuAKE-Remastered: Multi-Hop Knowledge Editing Can Only Be Advanced with Reliable Evaluations, *ICLR 2025 Spotlight* Aug 2024

Shaochen Zhong*, **Yifan Lu***, Lize Shao, Bhargav Bhushanam, Xiaocong Du, Yixin Wan, Yucheng Shi, Daochen Zha, Yiwei Wang, Ninghao Liu, Kaixiong Zhou, Shuai Xu, Kai-Wei Chang, Louis Feng, Vipin Chaudhary, Xia Hu

RouterArena: An Open Platform for Comprehensive Comparison of LLM Routers, *arXiv:2510.00202, ICLR 2026 In Submission* Sep 2025

Yifan Lu*, Rixin Liu*, Jiayi Yuan*, Xingqi Cui, Shenrun Zhang, Hongyi Liu, Jiarong Xing.

Who Routes the Router: Rethinking the Evaluation of LLM Routing Systems, *Neurips 2025 LLM Evaluation Workshop accepted, ICLR 2026 In Submission* May 2025

Jiayi Yuan*, **Yifan Lu***, Rixin Liu, Yu-Neng Chuang, Hongyi Liu, Shaochen Zhong, Yang Sui, Guanchu Wang, Jiarong Xing, Xia Hu

FAFO: Lossless KV Cache Compression with Draftless Fumble Decoding, *ICLR 2026 In Submission* May 2025

Hoang Anh Duy Le*, Shaochen Zhong*, **Yifan Lu**, Yingdong Dou, Jiayi Yuan, Yu-Neng Chuang, Xiran Fan, Guanchu Wang, Yuzhong Chen, Xia Hu

Sweeping Promptable Spoofs under the DirtyRAG: A Practical, Query-Blind RAG Attack Done Right, *USENIX 2026 In Submission* May 2025

Shaochen Zhong*, Jiamu Zhang*, Hoang Anh Duy Le, Wenya Xie, **Yifan Lu**, Xintong Sun, Mohsen Hariri, Hongyi Liu, Guanchu Wang, Zhaozhao Xu, Xiaotian Han, Jiarong Xing, Zirui Liu, Shuai Xu, Li Li, Rui Chen, Vipin Chaudhary, Ruixiang Tang, Xia Hu

Research Experience

Undergraduate Researcher, LLM Multi-Hop editing Audit and Benchmark Jan 2024 - Aug 2024
Advisor: Xia (Ben) Hu, Shaochen Zhong

- Identified and corrected dataset contamination in **MQuAKE** (a popular dataset for LLM knowledge editing), revealing that **33% to 76%** of cases were corrupted due to edited fact leakage across question instances.
- Conducted comprehensive re-benchmarking of existing methods and performed in-depth audits to evaluate their faithfulness and generalizability.
- Proposed **GWalk**, a faithful method utilizing a **lightweight editing knowledge graph** constructed from **fact triplets and entity semantic matching** with embedding similarity, outperforming SOTA methods.
- Accepted to ICLR 2025 as a Spotlight.

Graduate Researcher, LLM Routing May 2025 - Now
Advisor: Jiarong Xing, Xia (Ben) Hu

- Identified current LLM Router evaluation limitation: (1) limited task diversity, (2) imbalanced model pools, and (3) oversimplified evaluation methodologies.

- Proposed RouterArena, an evaluation benchmark with (1) board domain coverage, (2) distinguishable difficulties, and (3) extensive evaluation metrics.
- Both papers are under review by ICLR 2026

Teaching Experience

Algorithm and Data Structure, Rice University
Teaching Assistant, Instructor: Prof. Tasos Kyrillidis

2023 Spring & Fall, 2024 Fall

Linear Algebra, Rice University
Teaching Assistant, Instructor: Prof. Stephen Wang

2022 Spring

Awards and Honors

- *Louis J. Walsh Merit Scholarship* (\$1,500)

May 2024

- President's Honor Roll

2021, 2023, 2024

Technical Skills

Languages: Python, Java, C/C++

Tools/Packages: PyTorch, Transformers, Numpy, Pandas, Latex, git