

Kevin Xiang Li

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EDUCATION

• University of Michigan

Ann Arbor, MI, U.S.A

B.S. in Computer Science, Minor in Linguistics; GPA: 3.87/4.0

2020. 9 – 2024. 5

- **Honors:** James B. Angell Scholar (5 consecutive terms of all A's), Class of 1935 Engineering Scholarship (\$2000 for the 2023-2024 academic year)
- **Course Highlights:** Programming Languages, Compiler Construction, Intro to Operating Systems, Intro to Machine Learning, Intro to Natural Language Processing, Computer Vision, Computer Security, XR & Society

RESEARCH

• Future of Programming Lab

University of Michigan, U.S.A.

Researcher

2023. 9 - 2024. 8

- **Enhanced code LLMs with static retrieval:** Leveraged semantic context and static error correction capabilities of language servers to enhance LLM code generation accuracy.
- **Boosted LLM coding performance significantly:** Our static retrieval method resulted in 3.5x more unit tests passed on 5 realistic TypeScript benchmarks, compared to vector retrieval with GPT-4.
- **Published at OOPSLA:** Research published at OOPSLA 2024 in Pasadena, California.

WORK

• GienTech Technology

Shanghai, China

Intern

2024. 6 - 2024. 8

- **Devised Evaluations for LLMs:** Comprehensively evaluated LLMs on metrics like BLEU, ROUGE, Levenshtein Distance, and LLM-as-a-Judge methods. Incorporated evaluation module into existing PoC product.
- **Implemented Instruction Selection and Generation:** Leveraged latest techniques like CaR (Clustering and Ranking) and Self-Instruct to select and generate instructions for more efficient and performant fine-tuning.
- **Fine-tuned LLMs on Multiple GPUs:** Utilized popular frameworks like LLaMA-Factory and DeepSpeed to fine-tune open LLMs on multiple GPUs.

PROJECTS

• Cantonese Dictionary Mobile App

Hong Kong Lexicography Limited

Mobile App Developer (Remote)

2021. 10 - present

- **Implemented cross-platform UI using Flutter:** Supports both iOS & Android, rated 4.7 stars on Play Store.
- **Built custom search backend in Rust:** Supports Chinese character, English, Cantonese romanization input, with efficient indexing for over 50K entries.
- **Optimized user experience with local & cloud databases:** On-device SQLite database for bookmarks & settings, AWS DynamoDB for analytics to improve service.
- **Gained over 5K monthly active users:** Gained 10K+ installs on App Store & 6K+ installs on Play Store.

• Operating System Components

EECS 482 Intro to Operating Systems

Kernel Developer

2023. 10 - 2023. 11

- **Implemented a memory manager in C++:** Supports anonymous and file-backed pages. Led a team of 3 to optimize access performance.
- **Implemented a concurrent file server:** Efficiently handles multiple parallel user requests sent via sockets for creating, deleting, reading, and writing files.
- **Implemented a thread library:** Supports mutexes and conditional variables, utilizing low-level Linux interrupts for thread switching.
- **Developed testing infrastructure:** Combines unit tests & randomized tests to comprehensively cover edge cases, ensuring system stability.

SKILLS

Programming Languages: Rust, C++, Python, Dart, Swift, TypeScript, JavaScript

Technologies: Flutter, DynamoDB, SQLite, Unreal, Unity, Git, Docker, Jira