# 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)
- o 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

# • Stanford University

Stanford, CA, U.S.A

M.S. in Computer Science

2024. 9 - 2026. 6

# Research

Researcher

# • Future of Programming Lab

University of Michigan, U.S.A.

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

- o 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.
- o 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

- o Implemented cross-platform UI using Flutter: Supports both iOS & Android, rated 4.7 stars on Play Store.
- o Built custom search backend in Rust: Supports Chinese character, English, Cantonese romanization input, with efficient indexing for over 50K entries.
- o 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.
- o 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