

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

• Michigan Intelligent Programming Lab

University of Michigan, U.S.A

Researcher

2022. 4 - 2023. 8

- **Proposed a novel program synthesis algorithm:** The new algorithm lifts program interpretation from evaluating one program at a time to simultaneously evaluating all programs.
- **Outperformed the previous state-of-the-art method:** Outperformed previous state-of-the-art web automation technique by 6x & solved 2.5x more benchmarks.
- **Published at top conference POPL:** First-author research presented in London at the 51st ACM SIGPLAN Symposium on Principles of Programming Languages (POPL 2024).
- **Invited to give a talk at MIT PLR:** As one of 9 distinguished papers, invited to give a talk at the 2024 MIT Programming Languages Review (MIT PLR 2024).

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 15K 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.

• RenovAR Home Renovation App

Capstone Project

AR App Developer

2024. 3 - 2024. 4

- **Developed an AR home renovation app using Unity:** Leveraging Meta Quest 3's passthrough technology to seamlessly integrate virtual furniture into real space for intuitive visualization of interior design.
- **Supported replacing real furniture with virtual ones:** By scanning the space, users can remove real furniture and place virtual ones to freely plan layouts.
- **Renders real-time outdoor view:** Real outdoor view through windows can be seen in the AR environment, creating a sense of presence and enhancing spatial realism.

• 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 & thread library:** The server efficiently handles parallel requests. The thread library supports mutexes & conditional variables.
- **Developed testing infrastructure:** Combines unit tests & randomized tests to comprehensively cover edge cases, ensuring system stability.

SKILLS

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

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