

Jiaming Liu

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EXPERIENCE

Software Development Engineer Intern

Apr 2024 – Aug 2024

Microsoft

Shanghai, China

- Contributed to the [Microsoft/vscode-gradle](#) project (**3.1 millions+ downloads**) by **redesigning the system architecture**, consolidating the previous three separate Java processes (Task Server, Language Server, and Build Server) into a single unified process, reducing memory usage by approximately **40%**, enabling its integration into the [Microsoft/vscode-java-pack](#) and used by millions of users.
- Enhanced the Gradle Daemon plugin display by migrating from the Tooling API to **TypeScript**, resulting in improved performance and user experience within **VSCoDe**.
- Worked on **CI/CD** pipelines using **GitHub**, contributing to sprints focused on iterative development, telemetry, bug fixes, and feature improvements.
- Contributed to the [Microsoft/build-server-for-gradle](#) project by implementing a secure **named pipe** IPC method.

Research Assistant (Software Developer)

Jan 2024 – Mar 2024

University of Alberta | Under the supervision of Prof. Samer AdeeB

Edmonton, Canada

- Contribute to the development of [MecSimCalc](#), an interactive web platform for creating and sharing computational tools, focused on both frontend **React.js + Typescript** and backend **Django** enhancements.
- Developing educational applications with advanced functionalities to meet various educational and professional demands, featuring integration with Gmail, Google Spreadsheets, and Canvas.
- Optimized user-configured **Docker** environments, enabling online provision, duplication, and saving of multiple environments and user-end settings.

Software Development Engineer Intern

June 2023 – Oct 2023

Ericsson

Shanghai, China

- Developed a JSON log analysis tool using **Electron, Vue3, and Django**, integrating **ECharts** for visualization and **PouchDB** for optimized storage. Reduced team's manual log processing time by approximately **90%**.
- Contributed to a 3GPP protocol browsing system for Ericsson 2023 Hackathon using **Haystack + Solr, FlexSearch, and PostgreSQL**. Contributed to full-stack development with **Vue3 and Django**, deployed via Docker on remote Linux servers, **benefiting 1000+ employees** in Shanghai and boosting efficiency.

PROJECTS

User Persona Analysis and Interaction System | *Langchain, Python, Streamlit*

Jan 2024 – June 2024

- Leverage **Langchain** and LLMs for analyzing social media posts, employing classification to define different chains for analysis across dimensions such as personality and emotional state, with a focus on quantitative scoring.
- Engineered the analysis framework to utilize **LLMs** for dynamic categorization, enabling tailored evaluations and insights into user personas through advanced computational linguistics techniques.
- Developed the interaction system by integrating user posts into the **Pinecone** vector database, employing the RAG architecture for enhancing query responses.

EDUCATION

Simon Fraser University

M.S. in Professional Computer Science

Burnaby, Canada

Sept. 2024 – Apr. 2026

University of California, Berkeley

Exchange Student, Berkeley International Study Program (BISP), GPA: 3.73/4.0

Berkeley, United States

Aug. 2022 – May. 2023

East China Normal University

B.S. in Software Engineering

Shanghai, China

Sept. 2020 – July. 2024

SKILLS

Programming Languages: Python, Java, Typescript, SQL (Mysql), SwiftUI

Tools and Frameworks: Git, Vue3, React, Django, Node.js, Langchain, VS Code Extension API, ChatGPT