

Jie Liu

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EDUCATION

University of California, Berkeley Aug 2024 – May 2025 (Expected)

- *Master of Engineering in Electrical Engineering & Computer Science*
- Coursework: User Interface Design and Development, Machine Learning, Models optimization.

University of California, Berkeley Aug 2022 – May 2024

- *Bachelor of Arts in Computer Science* GPA: 3.63
- Coursework: Data Structure, Algorithms, Database and Distributed System, Operating System.

TECHNICAL SKILLS

- **Programming:** Java, C, Python, JavaScript, C++, Rust, Go, MATLAB, SQL, NoSQL, x86
- **Development:** React, Vue, GraphQL, MongoDB, SSM, Spring Boot, MySQL
- **Tools:** Git, GitHub, VSCode, IntelliJ, Webstorm, DataGrip, Linux, Docker, AWS, GDB, Junit

WORK EXPERIENCE

CrossValidation.ai, *Software Engineer Intern* May 2024 – Aug 2024

- Implemented a data management system with **PostgreSQL** to process data for **Llama3** finetuning.
- Utilized **AWS** services for efficient data processing and model training workflows.
- Integrated **OpenAI's** API for an interactive chat feature, enabling investors to build AI-driven investment strategies.

Kabila, *UI Developer Intern* May 2024 – Aug 2024

- Developed and optimized mobile app using **FlutterFlow**, ensuring performance and engagement.
- Designed UI components for the web and mobile app using **Figma**, enhancing user experience.

Building Blocks of Cognition Laboratory, *Undergraduate Researcher* May 2023 – May 2024

- Used **Python** and **MATLAB** for visual and auditory design in cognitive experiments.
- Leveraged **PsychoPy** for coding experiment, monitor brain activity, and data collection.
- Applied **machine learning** to analyze scan results, identifying patterns that contribute to research.

XingPack Automation Co., Ltd, *PLC Software Engineer Intern* May 2021 – Aug 2021

- Debugged and enhanced dual-axis motion control in PLC systems using the **CODESYS** platform on **Linux**, enhancing system reliability and performance efficiency.
- Optimized motor parameters and algorithms, result in a 20% reduction in processing time.
- Engineered a robotic arm for automated boxing, increasing automation and efficiency by 30%.

PROJECTS

Full Link User System | Java, React, Spring Boot, MyBatis Mar 2024

- Enhanced project efficiency by developing the data access layer with **MyBatis** and **MyBatis-Plus**.
- Developed and optimized user interfaces using **Ant Design Pro** for improved interaction.
- Ensured stable operations with **Docker** and **Nginx** deployments

Pintos Operating System | C, Linux, Docker Feb 2024

- Implemented core functionalities in Pintos including argument passing, syscalls, and floating points
- Extended Pintos by adding multithreaded user program support, strict priority scheduler and improvements to the file system.

RookieDB, A Database Implementation | Java, IntelliJ Nov 2023

- Implemented a **Java-based** SQL database system supporting B+ tree indexing and join algorithms.
- Added query optimization and a locking mechanism for concurrent transactions and integrity.