

ALEX LIN

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WORK EXPERIENCE

BlackRock — Software Engineer Intern

June 2024 – Aug. 2024

UX Engineering Team

New York City, NY

- Enhanced a high-impact financial insights R.A.G. chatbot with backend endpoints, React frontend components, and integrated PostgreSQL, increasing customer traffic to product pages
- Developed REST APIs integrating OpenAI and Meta LLMs, Microsoft Azure Blob storage, and vector databases, improving chatbot answer quality 25%
- Created BlackRock's vector image parsing solution, packaged as a Python library
- Automated data processing workflows with a fine-tuned vision model on Azure, saving 20 hours of manual labor

Boston Fusion Corp — Machine Learning Engineer Intern

June 2023 – Aug. 2023

ARCLIGHT Team

Boston, MA

- Developed a Flask API backend for vision models, enhancing company-wide AI development and reducing inference latency by 30%
- Implemented an object detection pipeline, improving the efficiency of model assessment by 2x by leveraging modular dashboards
- Optimized a Docker-based model training pipeline, eliminating setup time and increasing training efficiency by 50%

Boston Medical Data Science — Backend Engineer Intern

June 2022 – Aug. 2022

Startup

Boston, MA

- Developed a MongoDB database model to efficiently query and compute medical records, reducing query response time by 20%
- Automated internal database maintenance, saving 5 weekly management hours and reducing data staleness of 5+ million records via MongoDB Atlas
- Created a Java backend for application database operations, improving application data processing and querying speeds by 15%

PROJECTS

Squatty | <https://github.com/alex-lin64/Squatty>

- Implemented squat detection and classification using Tensorflow and Mediapipe, achieving real-time performance
- Enhanced user experience with Arduino-controlled features, significantly improving user satisfaction

Course Clusters | <https://github.com/alex-lin64/Course-Clusters>

- Developed a scalable course registration system using Node.js and Javascript, deployed on Amazon AWS
- Designed a core distribution API with data sharding, gossip protocol, front-end pages, and map-reduce

Book of Ps | <https://github.com/alex-lin64/Book-Of-Ps>

- Developed hypertext linking for text, images, and nodes with sharing features similar to Google Docs
- Built with Typescript, React, Node.js, MongoDB, and Express.js, and deployed via Vercel and Render

SKILLS

Languages: Typescript, Javascript, Python, Java, Go, C++, SQL

Technologies and Methods: Node.js, Azure, Jira, Tensorflow, React, AWS, Docker, Git, Agile

EDUCATION

Brown University

Providence, RI

Bachelors of Computer Science | Teaching Assistant: Machine Learning, Networks | GPA 4.00

Sep. 2021 – May 2025