Brandon Liang

brandon121511@gmail.com | (604) 60three-929eight | https://github.com/liangyon

TECHNICAL SKILLS

Programming: Python, Javascript, Typescript, Java, C, SQL, HTML/CSS
Frameworks/Databases: React.js, Next.js, Node.js, FastAPI, Express.js, Django, MongoDB, PostgreSQL
Cloud: Azure, GCP, AWS

EXPERIENCE

Software Developer — **Mar. 2025 - Present**
Optimize Everything — Remote
- Developed core rideshare user flows (user flow, ride matching) using React/TypeScript with Python/FastAPI, scaled to support 10,000+ users
- Designed and implemented a secure JWT authentication system with role-based access, refresh token rotation, and a validation flow for schemas
- Implemented comprehensive test automation covering 85% of critical paths (Jest frontend/Pytest backend)
- Took ownership in key early frontend infrastructure decisions and payment workflow planning in a fast-paced startup environment

Software Developer — **Oct. 2024 - Feb. 2025 (Contract)**
Z-Motors Group — Vancouver, BC
- Launched a marketing website with Next.js and Decap CMS that improved content update times from 2 hours down to 10 minutes by enabling non-technical staff to manage content independently
- Reduced page load times to under 2 seconds by implementing Next image optimization strategies
- Delivered client-side search functionality with debounced inputs and lazy-loaded results, improving interaction speed by 40% and reducing API calls by 30%

Software Developer — **Sept. 2021 - Sept. 2022**
Ontario Ministry of Health — Toronto, ON
- Developed and tested a hospital budget reporting tool to track and analyze departmental spending, serving 200+ facilities, using React (TypeScript) for the frontend and Node.js-Express APIs with MongoDB on Azure
- Built a dynamic reporting dashboard with interactive visualizations, enabling real-time budget insights and reducing the time spent on manual data analysis by 40%
- Optimized database queries and implemented efficient archiving that reduced page load times from 8s to 2s
- Designed an in-browser spreadsheet component using React and custom hooks that streamlined data entry workflows, reducing need for page refreshes and reloads by 50%

PROJECTS

Song Library — **Express-Next.js**
https://www.selah-library.app
- Developed and deployed a full-stack Next.js/Express.js application with Google Drive API integration, serving 20+ active users in production
- Designed a secure, responsive system with automated cloud synchronization, comprehensive music metadata management, and advanced search capabilities, allowing users to efficiently find and access sheet music

Space Invaders — **Android Studio-Java**
https://github.com/liangyon/phase-1
- Developed a flexible Java game engine and created a classic Space Invaders game for Android
- Integrated efficient image processing techniques to enhance performance, resulting in 20% faster rendering

EDUCATION

University of Toronto — **May, 2023**
Honours Bachelor of Science, Mathematics, Computer Science — Toronto, ON