Brandon Liang

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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 using React/TypeScript frontend with FastAPI microservices, scaled to support 10,000+ daily transactions
- Designed and implemented a secure JWT authentication system with RBAC, refresh token rotation, and validation flow
- Implemented comprehensive test suite using Jest/Pytest covering frontend and backend functionality
- Led frontend infrastructure decisions and payment workflow architecture in fast-paced startup environment, collaborating cross-functionally to deliver the MVP

Software Developer   **Oct. 2024 - Feb. 2025 (Contract)**
Z-Motors Group   Vancouver, BC
- Launched a marketing website with Next.js and Decap CMS that reduced operating and maintenance costs by 85% annually
- Enabled non-technical staff to manage content independently, reducing content update workflows by hours
- Reduced page load times to under 2 seconds by implementing Next image optimization strategies
- Delivered client-side search with debounced inputs and lazy-loaded results, improving interaction speed by 40%

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 production-ready full-stack application with Next.js/Express.js architecture and Google Drive API integration, actively serving 20+ users with 99.9% uptime
- Implemented secure cloud synchronization system with automated metadata processing and advanced search capabilities, enabling efficient music library management and cross-platform compatibility
- Applied responsive design principles and performance optimization techniques for seamless user experience

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   Toronto, ON