

Brandon Ly

Software Engineer

About

📍 West Covina, CA, US

✉ brandonkly@ucla.edu

📞 (626)-384-8933

🔗 [brandonkylely](#)

🌐 [Brandon Ly](#)

📁 [Portfolio](#)

Languages

HTML CSS

Javascript/Typescript

Python C MySQL

MongoDB

Libraries and Frameworks

React.js Node.js

Express.js Handlebars.js

Bootstrap TailwindCSS

Three.js

Agile Tools

Git Trello Docker Jest

Summary

Full stack software engineer leveraging a background in biochemistry and research to build intuitive and responsive web applications. Experienced in problem solving and collaboration. Knowledgeable on industry best practices and agile development.

Education

Harvard University/edX

Certificate, CS50x: Computer Science

05/2023 - 07/2023

University of California, Irvine

Certificate, Coding: Computer Science

09/2022 - 03/2023

University of California, Los Angeles

Bachelor of Science, Biochemistry

08/2016 - 12/2020

Open Source Projects

Anaxi · <https://www.anaxi.app/>

A map app able to run proximity searches and route calculations on a 3d map.

React.js MongoDB GoogleMaps API [deck.gl](#)

- Streamlined map load times by 100% by implementing React best practices for component rendering and state management.
- Handled polyline data to calculate and display animated routes for user searches.
- Engineered database routes for users to save and update their favorite locations or routes.

isGameTrue · <https://bit.ly/isGameTrue>

A platformer RPG where users can compete for high scores.

Handlebars.js SQL RESTful API [Phaser.io](#)

- Optimized performance by 50% through proper asset management and unloading.
- Managed data transfer between levels within Phaser framework and working database.
- Developed multitude of game mechanics including enemy AI, spawning/despawning, level transition, and sword combat.

duck blog · <https://bit.ly/the-duck-blog>

A silly tech blog.

Handlebars.js SQL RESTful API

- Improved site scalability by implementing offset pagination.
- Designed relational database with full CRUD operations between users, posts, and comments.
- Incorporated a Reddit-inspired page layout using TailwindCSS.

Experience

Confidential

Aerospace Chemicals
Chemist

02/2022 - 09/2022

Contracted to join a research and development team to develop aerospace products for aircraft construction.

- Increased the material properties of new chemical products by up to 70% in some benchmarks.
- Successfully improved team efficiency by 50% through proper project management, communication, and workflow optimization.
- Collaborated with research teams, industry professionals, and university professors to spearhead potential new formulations.