Blake Truong

Computer Engineer

206-795-9037 | truongblake@gmail.com | Kirkland, WA | linkedin.com/truongblake | github.com/truongblake | blaketruong.com

Education

Bachelors Computer Engineering – University of Washington Bothell   June 2024

Relevant Courses

Java I & II, C++ Data Algorithms I & II, Software Engineering, Embedded Systems, Operating Systems, Technical Writing, Microprocessor System Design, Sensor Systems

Relevant Work Experience

- **Electrical Engineering Lab Technician** – University of Washington   September 2022 – March 2024
  - **Mentored** students in intermediate **circuit design**, **analysis**, **testing**, and **debugging**, resulting in improved understanding and success in their projects.
  - **Promoted a collaborative atmosphere** by facilitating **group discussions** and **team-building activities**, fostering stronger relationships and **teamwork** among peers.
  - Demonstrated **effective communication skills** by clearly explaining **technical concepts** to peers, leading to improved understanding and **collaboration**.

Projects

- **Real-Time Chat**
  - Developed a MERN-based real-time chat app with **Socket.io** to enable instant messaging using **WebSocket** communication in an event-driven architecture.
  - Utilized **MongoDB** to persist chat history and support message continuity, with room-based messaging for enhanced user engagement.

- **Rental Movie Store**
  - Developed a **Rental Movie Store Database** using **hash tables** for customer management and **sorting algorithms** for organizing movies by genre and attributes.
  - Implemented **factory method design pattern** for creating movie objects, enhancing flexibility in managing genre-specific classes (Comedy, Drama, Classics).
  - Built functionalities including **transaction tracking**, **borrow/return operations**, and **inventory management** using text file imports for movie and customer data.

- **Ecommerce Website**
  - Built a comprehensive full-stack eCommerce platform using **MERN stack** with RESTful API integration, enabling efficient front-to-back communication.
  - Implemented **JWT-based authentication** to secure user sessions.
  - Designed **product management features** in **MongoDB**, gaining experience with structured data handling and backend data management.

- **Portfolio Website**
  - Developed a responsive portfolio site using **React** and **TailwindCSS**, styled for fast, adaptive performance with **Vite** as the build tool.
  - Utilized **utility-first CSS** for streamlined and customizable styling across devices, emphasizing a user-friendly, modern design.
  - Hosted on a **Raspberry Pi** using **Apache**, gaining hands-on experience with **basic computer networking**, server setup, and configuration for remote accessibility.