Robert Chen

Vancouver, BC
Canada

robchendev@gmail.com
Portfolio: robchen.dev

github.com/robchendev
linkedin.com/in/robchendev

Skills

Programming Languages: JavaScript, TypeScript, Java, Python, C++
Front-End: React, React Native, NextJS, Tailwind, Redux, HTML, CSS
Back-End: Node, Express, SQL, PostgreSQL, MongoDB, SQLite

Development Tools: Git, Postman, Docker, Kubernetes
Team Tools: Agile Methodology, Jira, Confluence
Operating Systems: MacOS, Windows, Linux

Work Experience

Software Engineer   December 2022 - December 2023
Eddie van der Meer Ltd, Part-Time   Purmerend, NH, Netherlands (Remote)

- Developed a website using React, NextJS and Chakra UI with Tailwind CSS, efficiently serving approximately 1,000 daily visitors.
- Improved a table search algorithm by rendering subsets of information via pagination which improved re-rendering time by over 50,000%.
- Reduced operating costs of the website by 97% while enhancing bandwidth and reliability without compromising quality or functionality.
- Implemented CI/CD with GitHub Actions and mentored a junior developer, optimizing deployment processes and team productivity.

Full-Stack Web & Mobile Developer Co-op   September 2022 - December 2022
Jimu Labs, Full-Time   Victoria, BC, Canada (Remote)

- Developed key features for a full-stack React web service to automate onboarding interactions on chat platforms such as Discord and Slack.
- Programmed an interactive flowchart client app prioritizing intuitive UI design, enhancing UX for thousands of non-technical customers.
- Leveraged Sentry for debugging and fast implementation of client-requested features in React Native for iOS and Android mobile devices.
- Engineered social media mobile app focused on gambling; ensuring data security by using PostgreSQL and Supabase for authentication.

Software Engineer Intern   June 2022 - September 2022
Masimo Corporation, Full-Time   Vancouver, BC, Canada

- Developed a full-stack Angular app with Node and Express, enabling over-the-air updates for medical devices assisting millions of patients.
- Built a GUI on devices used by scientists to retrieve live updated patient data, accelerating data retrieval by 10x with real-time feedback.
- Supported the engineering team in their cross-platform development by creating unit tests and documenting RESTful APIs.
- Implemented a secure authentication system in the Express back-end using Joi validation with JWT, restricting access to authorized users.

Projects & Organizations

VikeLabs University Software Club - Leadership

- Organized meetings with the software club's leadership committee to plan lessons, seminars, and social events for club members.
- Mentored beginner developers on software development practices and techniques and oversaw projects within the software club.
- Programmed an administrative web tool for the leadership members of the club using React, PostgreSQL, Supabase, and Prisma.
- Maintained a secure university domain email verification system built in the Go programming language and a locally-saved SQLite file.

Guitardex - Guitar Techniques and Audio Production Education Website - guitardex.com, github.com/robchendev/Guitardex

- Developed a web app with React, utilizing server-side functions to optimize build-time data generation for client-side serving efficiency.
- Engineered a sophisticated audio comparison visualizer with Web Audio API, enabling detailed visualization of audio data for education.
- Partnered with guitar educators to find and address prevalent learning obstacles amongst guitarists and perform systems analysis.
- Implemented features and fixed bugs based on user-tested feedback, utilizing CI/CD pipelines with GitHub actions for rapid deployment.

FRET. - Discord Bot - github.com/robchendev/FRET

- Programmed an open-source JavaScript Discord bot hosted on DigitalOcean VPS to organize and encourage user discussion.
- Integrated MongoDB to manage user data and enable dynamic information processing and interactions by the bot.
- Implemented a suite of commands and features to engage users, including a forum thanking system and a weekly challenge tracker.
- Architected a scalable bot infrastructure with low latency and high reliability, ensuring a seamless user experience.

Education

University of Victoria   September 2019 - December 2023
B.Sc. in Computer Science (Cumulative GPA: 3.49/4.33)   Victoria, BC, Canada