Robert Chen

Portfolio: robchen.dev Vancouver BC, Canada robchendev@gmail.com (778)-956-9818 github.com/robchendev linkedin.com/in/robchendev

Skills

Programming Languages: JavaScript, TypeScript, Python
Front-End: React, React Native, NextJS, Vite, 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

Front-End Web Developer March 2024 - April 2024
Natasha Guitars, Freelance (natashaguitar.com) Portland, OR, USA (Remote)
- Developed apps and extended shopify theme using Liquid, HTML, CSS and JS to optimize customer experience, boosting revenue by 50%.
- Collaborated with global teams to translate business needs to technical solutions, promoting product sales to over 2,000 customers daily.

Front-End Web Developer January 2024 - February 2024
Eddie van der Meer, Freelance (eddievandermeer.com) 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 speed by 50,000% by re-engineering list filtering algorithms and adding component memoization.
- Reduced website operating costs for the client by 97% while enhancing bandwidth and reliability without compromising functionality.

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.
- 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 betting; 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.
- Implemented a secure authentication system in the Express back-end using Joi validation with JWT, restricting access to authorized users.

Projects

Pokemon Battle Replication - Portfolio Website - robchen.dev, github.com/robchendev/portfolio-site
- Developed a portfolio website in React in the style of a Pokemon battle, enhancing user engagement through gamified elements.
- Engineered a turn-based game engine used by the portfolio website to handle combat logic and animations for fluid gameplay interactions.

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.

Open Source - Fribbels' Honkai Star Rail Optimizer - fribbels.github.io/hsr-optimizer, github.com/fribbels/hsr-optimizer
- Developed an image customizer for the user-end's character data showcase, showing wide usage of the feature on social media shares.
- Implemented fixes for CORS restrictions within a screen capture library, fixing and future-proofing the issue for 1/3 of the app's user base.

VikeLabs University Software Club - Administrative Tools
- Lead the development of an administrative web tool for the 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.

FRET Discord Community Manager Bot - github.com/robchendev/FRET
- Programmed a Discord bot using 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.

Education

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