

# Robert Chen

## Software Engineer

Vancouver, BC, Canada  
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Portfolio: [robchen.dev](https://robchen.dev)  
[github.com/robchendev](https://github.com/robchendev)  
[linkedin.com/in/robchendev](https://linkedin.com/in/robchendev)

### Education

#### University of Victoria

Bachelor of Science in Computer Science (GPA: 3.52)

September 2019 - December 2023

Victoria, BC, Canada

### Work Experience

#### Software Engineer

March 2024 - April 2024

Natasha Guitars, Contract ([natashaguitar.com](https://natashaguitar.com))

Portland, OR, USA (Remote)

- Doubled online sales revenue by developing plugins and themes using Liquid, HTML, CSS and JS to optimize customer retention.
- Promoted product sales to thousands of customers by collaborating with global teams to translate business needs to technical solutions.

#### Software Engineer

January 2024 - February 2024

Eddie van der Meer, Contract ([eddievandermeer.com](https://eddievandermeer.com))

Purmerend, NH, Netherlands (Remote)

- Increased domain authority by generating high-quality backlink traffic, leading to over 1,000 daily visitors on a website developed in React.
- Boosted product sales revenue by 40% through the development of advanced search parameters and a 50,000% faster table search algorithm.
- Reduced website operating costs by 97% by developing proprietary software as replacements for subscription-based third party services.

#### Full-Stack Web & Mobile Developer Co-op

September 2022 - December 2022

Jimu Labs, Full-Time

Victoria, BC, Canada (Remote)

- Enhanced user workflows and automation options by 30% through development of features for a full-stack React automation platform.
- Improved bug resolution time by 25% and expedited hotfixes for iOS and Android devices by leveraging Sentry for efficient debugging.
- Engineered social media app features in React Native, securing data access with PostgreSQL Row Level Security and token authentication.

#### Software Engineer Intern

June 2022 - September 2022

Masimo Corporation, Full-Time

Vancouver, BC, Canada

- Assisted millions of patients by developing a full-stack Angular app with Node and Express to facilitate over-the-air medical device updates.
- Accelerated real time patient data retrieval speeds by 1000% by implementing GUIs on devices used by scientists, providing live feedback.
- Implemented a secure authentication system in the back-end, restricting access to authorized users within the company's private network.

### Projects

#### Pokemon Battle Replication - Portfolio Website - [robchen.dev](https://robchen.dev), [github.com/robchendev/portfolio-site](https://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 logic 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](https://guitardex.com), [github.com/robchendev/Guitardex](https://github.com/robchendev/Guitardex)

- Engaged over 1200 users monthly by building a React web app with server-side data generation, reducing loading times by 40%.
- Built 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](https://fribbels.github.io/hsr-optimizer), [github.com/fribbels/hsr-optimizer](https://github.com/fribbels/hsr-optimizer)

- Achieved a 10% increase in social media shares of the app by developing an image customizer for the user-end's character data showcases.
- Implemented fixes for CORS restrictions within a screen capture library and future-proofed the issue affecting 1/3 of the app's user base.

#### VikeLabs University Software Club - Administrative Tools

- Lead the development of a secure administrative web tool for club members using React, PostgreSQL, AWS 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](https://github.com/robchendev/FRET)

- Programmed a bot using Discord API and JS to manage user data with MongoDB for dynamic interactions and information display.
- Improved user engagement by 60% in a community discord server by implementing a forum thanking system and a challenge tracker.

### 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