

# Sam Bai

Full-Stack Software Engineer

Hamilton, Waikato, New Zealand

[sambai.codes@gmail.com](mailto:sambai.codes@gmail.com) | 027 460 4700

[linkedin.com/in/sam-bai-dev](https://linkedin.com/in/sam-bai-dev) | [github.com/sambai-dev](https://github.com/sambai-dev) | [sambai.dev](https://sambai.dev)

## Professional Summary

Results-driven Wintec Software Engineering graduate (2024) with project-based full-stack experience in React, Next.js 16, TypeScript, Supabase, and real-time collaborative web applications. Combines technical prowess with 4+ years in cryptocurrency and blockchain analysis, seeking a junior full-stack or frontend role.

## Technical Skills

**Languages:** TypeScript, JavaScript (ES6+), Python, C#, SQL, HTML5, CSS3

**Frontend:** React.js, Next.js (App Router), Tailwind CSS, Shadcn, Framer Motion, dnd-kit

**Backend:** Supabase (PostgreSQL + Row Level Security), Node.js, Express.js, Clerk Authentication, Stripe Integration

**Tools & Platforms:** Git/GitHub, VS Code, Vercel, Docker, Selenium (Python & C#)

**AI-Assisted Development:** Claude, Perplexity, Google Antigravity; exploring automated testing (Playwright, Vitest, Jest, Cypress) with AI-assisted workflows in Antigravity

**Methodologies:** Agile/Scrum, REST APIs, Responsive Design, Browser Automation, Database Design

## Key Projects

### Task Management Platform (taskflow-board) | Full-Stack Developer

Tech Stack: *Next.js 16 (App Router), Supabase (PostgreSQL + Realtime), Clerk, Stripe, TypeScript, Tailwind CSS, Shadcn, dnd-kit*

- Built drag-and-drop task management with optimistic UI for seamless UX using dnd-kit
- Implemented Supabase Row Level Security (RLS) policies to ensure data privacy and multi-tenant security architecture
- Integrated Clerk for OAuth authentication (Google, GitHub) and Stripe for subscription-based payment processing
- Built real-time collaboration features using Supabase Realtime subscriptions for live updates across multiple users
- Deployed to Vercel with optimized build configuration, leveraging server-side rendering (SSR) and static generation for performance
- Live Demo: Application with CRUD operations and responsive design  
[GitHub Code](#) | [Live Demo \(taskflow-board\)](#)

### Browser Automation Suite | Developer

- Developed Python Selenium scripts to automate repetitive web interactions, significantly reducing manual data entry time
- Created batch scripts to streamline local development workflows, environment setups, and deployment processes
- Implemented error handling and logging mechanisms for reliability

### Portfolio Website | Developer

- Built responsive portfolio site showcasing projects, resume, and LinkedIn integration
- Designed with modern web standards using React and Tailwind CSS for optimal user experience

## Professional Experience

### Software Engineering Intern | Waka Transportation Community

Tauranga, New Zealand | March 2024 – July 2024

- Collaborated with a cross-functional development team to build the Waka Transportation Platform, a community-driven transport solution connecting riders with local transportation services
- Contributed to the full software development lifecycle (SDLC) using the MERN Stack (MongoDB, Express.js, React, Node.js)
- Translated UI/UX designs into responsive, reusable React components, ensuring cross-browser compatibility
- Implemented RESTful API endpoints and integrated frontend with backend services for seamless data flow
- Participated in code reviews, weekly stand-ups, and sprint planning meetings, gaining hands-on experience in Agile workflows and collaborative version control (Git/GitHub)
- Debugged production issues and optimized component performance through React profiling tools

## **Independent Crypto Trader & Market Analyst | Self-Employed**

*Hamilton, New Zealand | 2021 – 2025*

- Managed a personal cryptocurrency and DeFi portfolio over 4 years using data-driven strategies across multiple exchanges and accounts
- Developed strong analytical and risk assessment skills while deepening knowledge of blockchain fundamentals, Web3 protocols, and smart contracts
- Used and customized *automated trading and portfolio tracking tools (leveraging Python and other platforms)* for market analysis and process automation

## **Education**

### **Bachelor of Applied Information Technology (Software Engineering)**

Waikato Institute of Technology (Wintec) | Hamilton, New Zealand

Graduated: Class of 2024

Relevant Coursework: *Software Development, Web Development, Database Design & SQL, Systems Analysis, OOP, Software Testing, Mobile Apps, Cyber Security, Big Data & Analytics, Game Development, Project Management / SE Project*

Capstone Project: Led development of a Kotlin-based Android drug control application for Anglesea as project manager, coordinating a team to design and implement core features for tracking controlled and uncontrolled medications

## **Skills Development & Additional Information**

### **Core CS & Frontend Fundamentals:**

Strengthening data structures and React fundamentals through documentation, tutorials, and project-based learning

### **Continuous Learning:**

Exploring advanced React patterns, modern TypeScript best practices, and full-stack architecture with Next.js and Supabase

### **Community Engagement:**

Studying open-source projects and modern development practices to stay current with industry trends

### **Work Eligibility:**

Permanent Resident of New Zealand (since 5 May 2022) – authorized to work without sponsorship; based in Hamilton, open to in-office, hybrid, or remote roles anywhere in New Zealand

### **Career Focus:**

Seeking full-time or contract junior software engineer / full-stack or frontend roles to gain commercial experience and grow within a modern engineering team