

Sam Bai

Full-Stack Software Engineer
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Professional Summary

Results-driven Wintec Software Engineering graduate (2024) with hands-on full-stack experience in React, Next.js 16, TypeScript, Supabase, and secure real-time apps. 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/UI, 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, Cursor, Google Antigravity), Testing with AI-assisted workflows in IDEs like Cursor (Playwright, Vitest, Jest, Cypress)

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/UI, @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: Fully functional application with comprehensive CRUD operations and responsive design

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 substantial personal cryptocurrency and DeFi portfolio over 4 years using data-driven trading strategies
- Developed analytical and risk assessment skills by monitoring market trends, evaluating tokenomics, and executing trades across multiple exchanges
- Gained deep understanding of blockchain technology, Web3 protocols, smart contracts, and decentralized finance (DeFi) ecosystems
- Used and customized existing automated trading and portfolio tracking tools (leveraging Python and other platforms) for market analysis
- Demonstrated resilience and adaptability in navigating highly volatile markets and rapidly evolving technologies

Education

Bachelor of Applied Information Technology (Software Engineering)

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

Graduated: Class of 2024

Relevant Coursework: *Software Development, Application Development, Database Design, Database Modelling and SQL, Web Development, Systems Analysis, Object-Oriented Programming, Mathematics for Information Technology, Software Testing, Game Development, Mobile Application Development, Cyber Security, Big Data and Analytics, Project Management / Software Engineering 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

Core CS & Frontend Fundamentals:

Actively strengthening understanding of data structures and React.js features through documentation, tutorials, and project-based learning

Continuous Learning:

Regularly exploring emerging technologies including advanced React patterns, modern TypeScript best practices, and full-stack application architecture with Next.js and Supabase

AI-Enhanced Development:

Proficient in leveraging AI tools (Claude, Perplexity, Cursor IDE, Google Antigravity) to accelerate development workflows, debug complex issues, research best practices, and scaffold tests (Playwright, Vitest, Jest, Cypress) within AI-powered IDEs

Community Engagement:

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

Additional Information

Permanent Resident of New Zealand (since 5 May 2022) – authorized to work without sponsorship

Based in Hamilton, Waikato – open to in-office, hybrid, or remote roles, including relocation opportunities 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

Availability: Immediate