Nick Stebbings 🔗 🐙 🔴

Software Engineer

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Profile Summary

• **Full-Stack Engineer** with a wealth of experience in developing user-friendly, responsive, and scalable web applications, leveraging expertise in peer-to-peer and distributed network systems.

• Expertise spanning from high-performance web applications and decentralized APIs within fast-paced environments, with contributions during all phases of the **Software Development Life Cycle** from requirements analysis to maintenance.

• Extensive technical skill set, with mastery in **TypeScript**, **Ruby**, and **Rust**, focusing on technologies like REST APIs and micro-service architecture to enhance data integrity and system scalability. Experienced in creating front-end and back-end website architecture, server-side APIs, and integrating databases.

• Effective collaborator, well-versed in Agile methodologies, aligning **cross-functional teams**, including UI/UX designers, product managers, and software engineers, to design new features and enhance current systems.

Technical Skills

Programming Languages: JavaScript, TypeScript, Ruby, Rust, HTML5, CSS3 (Sass)
Frameworks & Libraries: React, Vue.js, Next.js, LitElement
Databases: PostgreSQL MySQL, Firebase
Cloud Services, DevOps & Dev. Tools: Docker, Github Actions, Digital Ocean, Heroku, Git, Storybook
Domain Expertise: Data Visualization, Web Components, Semantic HTML, Responsive UI Design, SVG Animation, DevOps, REST APIs, Micro-service architecture

Work Experience

Neighbourhoods Ltd. ⤴   Remote
TypeScript/Rust Programmer   Apr. 2023 - Present

• Implemented the Neighbourhoods Launcher, a hub for distributed applets, utilizing **LitElement** and **TypeScript**, utilizing **OOP** & **Component-Driven Development** to facilitate application sharing within and across communities.

• Developed a design system comprising **Web Components** and a **Storybook**, collaborating with the design team to ensure visually consistent and maintainable features in the Launcher, utilizing **HTML** and **CSS**, incorporating encapsulation and schema-based form validation, and enhancing component integration testing.

• Developed and rigorously evaluated features for the Holochain-based peer-to-peer **API** using **Rust**, incorporating **WASM compilation** and **Unit Testing rules** and contributed to the construction of the Feed applet that showcased the Sensemaker engine, which facilitates the generation of social metadata for communities.

• Developed a design system and bolstered backend functionalities for a longstanding **Holochain** project with **Rust**, ensuring memory safety and modular design, while also establishing rules for peer validation of data.

• Collaborated within a cross-functional team including **Product Designer, Tech Lead,** and **software engineers**, employing **Agile** practices to effectively deliver software using **Kanban**.

• **Presented** to stakeholders, leveraging storytelling and video demonstrations, and adapting messages to audiences.

Freelance   Auckland, New Zealand
Developer, Marae Tech Ltd. ⤴   Jul. 2022 - Apr. 2023

• Developed and integrated a bespoke interactive learning module into an established animation-rich educational platform, utilizing **PHP**, enhancing user engagement, and incorporating theme customization and grade sync/reporting to achieve improved user completion rates.

• Implemented a learning management system (LMS) utilizing **Moodle** to manage dependencies essential for tracking student progress via resources from h5p.org, and integrated grade synchronization using **LTI**.

Developer, Aunt Jenny Ltd. [↗]   Feb. 2021 - Apr. 2023

• Engineered a stock management and fulfillment **Shopify app**, integrating **webhooks** to automate inventory updates and streamline order processing, significantly enhancing operational efficiency and customer satisfaction.

• Engaged with partners to understand business use cases, gather technical requirements, and extract architectural significance for solution design. Conveyed challenges and opportunities in a clear and concise way, adapting the message to each audience's specific technical literacy.

• Evaluated software solutions, deploying a variety of tests including **Unit Tests** and **Integration Tests** with **Jest**.

y5Labs Ltd.   Hamilton, New Zealand
Full Stack Developer   Apr. 2022 - Jul. 2022

• Evaluated and analyzed complex business problems to implement effective solutions, coordinating with the team, often remotely, on the best approaches to assigned tasks.

• Developed solutions utilizing micro-service architecture and an agile approach to ensure maximum performance, availability, and security, via a **Service-oriented Architecture.**

• REST APIs using **JavaScript** and **Node.js/Express.js,** incorporating concurrency through **Web Workers** to optimize asynchronous programming and error handling, effectively serving **JSON** data to deliver efficient e-commerce solutions.

• Developed a test user interface using **React**, incorporating a **component-based architecture** to illustrate and record new functionalities before their launch.

Launch School [↗]   Remote
Software Engineering Trainee   Jan. 2019 - Feb. 2021

• Crafted clean, straightforward, and thoroughly tested code for multiple projects using **Ruby** and **JavaScript**.

• Documented technical procedures and acquired skills in a Medium blog, enhancing peer learning, through coursework in Networking, cyber-security, and basic **Linux CLI/Shell** scripting.

Self-employed   London, UK
Co-Founder   Aug. 2017 - Apr. 2018

• Co-founded and optimized a social venture, improving mental health and employment preparedness through barista training, resolving issues, enhancing operations, and achieving excellent service delivery.

Software Projects

Habit/Fract [↗]   Nov. 2023 - Present

• Developed the data layer in **Rust** with techniques like interior mutability and **recursive tree** generation, while enhancing the **React** frontend through custom hooks for state management and schema validation, coupled with **GraphQL** optimizations for caching and dynamic type generation.

• Implemented **Rust**-based algorithms within the desktop Tauri application, utilizing **Serde** for rapid serialization of data structures, integrating **React**, and leveraging Rust patterns like **ownership**, **borrowing**, and **concurrency** to enhance performance, achieving a peak response time of under **50ms**.

• Implemented advanced data structures and smart pointers in **Rust,** constructing a tree to create a visualization, with **Rust** optimizing memory safety and concurrency through **ownership,** and enhancing visualization capabilities by leveraging interactive tree charts with **d3.js.**

Concept app and presentation for Holochain distributed cloud storage on mobile [↗]   May 2023

• Collaborated with community developer Hedayat Abedijoo to introduce **Holochain at Volla Community Days**, initiating the first mobile development projects that significantly enhanced secure, distributed communication technology integration within Volla products, fostering a pivotal privacy-centric partnership.

Certifications

Holochain & Rust Developer Immersive with Marcus Phillips   Mar. 2022