

## Full Stack Developer (Rust | Node.js | TypeScript | React | Vue)

Specializing in TypeScript, Rust, and Node; at home with multiple front-end frame-works (favoring React and Vue), with special interests in p2p/distributed systems and data visualization.

## Profile Summary

- Expertise span from building high-performance web applications and decentralized APIs, with contributions during all phases of the **Software Development Life Cycle**, to requirements analysis, testing and maintenance.
- Extensive technical skill set, with mastery in **TypeScript**, **Node**, and **Rust**, focusing on technologies like blockchain, RESTful APIs and micro-service architecture to enhance data integrity and system scalability. Experienced in creating front-end and back-end website architecture, mobile-first design, and integrating data layers using PostgreSQL, GraphQL and NoSQL.
- Effective collaborator, well-versed in Agile methodologies, aligning **cross-functional teams**, including UI/UX designers, product designers, software engineers and managers, to design new features and enhance current systems.

## Technical Skills

**Programming Languages:** Rust, JavaScript, TypeScript, Ruby, PHP, HTML5, CSS3

**Frameworks & Libraries:** React, Vue.js, Next.js, LitElement, Tailwind, Redux, RTL, Jest

**Databases, Cloud Services, DevOps:** PostgreSQL MySQL, Firebase, Couchbase, Docker, GH Actions, Digital Ocean, Heroku

**Domain Expertise:** RESTful APIs, Linux systems, Data Visualization, SVG Animation, Building design systems, Figma to code

## Work Experience

### Inkibra Ltd.

Remote

#### Full Stack Developer

Dec. 2024 - Present (Temp Contract)

- Added front-end features to their flagship mobile fitness app, including: a workout challenge carousel, AI chat prompt window, and fitness routine program list, thus helping to engage and on-board new users via social sharing.
- Re-built their iOS only app for the Android platform by re-writing core plugins, thereby helping to increase the app's potential market reach by over 100% (based on worldwide OS market share figures).

### Neighbourhoods Ltd.

Remote

#### Full Stack Developer

Apr. 2023 - Aug. 2024

- Implemented the Neighbourhoods Launcher, a hub for distributed applets, utilizing LitElement and **TypeScript**, with **OOP** & **Component-Driven Development** to facilitate application sharing within and across communities.
- Developed and rigorously evaluated features for the Holochain-based peer-to-peer **API** using **Rust**, incorporating **WASM compilation** and **Unit Testing rules**. Contributed to the construction of the *Feed applet*, that showcased the Sensemaker engine - a framework that facilitates the generation of social metadata for communities.
- Developed a design system comprising **Web Components** and a **Storybook**, collaborating with the design team to ensure visual consistency and maintainability in the Neighbourhoods Launcher, utilizing **semantic HTML** and **CSS**, using encapsulation, schema-based form validation, and enhancing component **integration testing** using Vitest.
- 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

#### Full Stack Developer, Marae Tech Ltd.

July 2022 - Apr. 2023

- Developed and integrated a bespoke interactive learning module into an established animation-rich educational platform utilizing **PHP**. Enhanced user engagement by incorporating theme customization and grade sync & student quiz grade reporting thereby helping to achieve improved student completion rates.

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

#### Full Stack Developer, Aunt Jenny Ltd. [↗](#)

Feb. 2021 - Apr. 2023

- Engineered a stock management and fulfillment **Shopify app**, using **Next.js**, integrating **webhooks** to automate inventory updates and streamline order processing, significantly enhancing operational efficiency and reducing processing time by 10 minutes per order.
- Updated the store-front template using **Liquid** so that live stock data could be fed through from the backend **GraphQL API** thereby increasing customer satisfaction. Added a webhook for automated customer email updates to reduce the number of manual stock emails by around 50%.

#### y5 Labs Ltd. [↗](#)

Hamilton, New Zealand

#### Full Stack Developer

Apr. 2022 - July

2022

- Designed and implemented a component-based **React** UI for testing new features, improving development efficiency and reducing time-to-market.
- Evaluated and analyzed complex business problems to implement effective solutions, coordinating with the team (often remotely) on the best approaches to assigned tasks. Included:
  - building **REST** APIs using **JavaScript** and **Node/Express**
  - incorporating concurrency through **Web Workers** to optimize asynchronous programming and error handling
  - effectively serving **JSON** data to deliver efficient e-commerce solutions to a major AU/NZ corporate client

#### 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.

## Education

#### University of Bath - Mathematics BSc

2006 - 2007 (Changed degree)

#### University of Sheffield - Economics and Politics BA

(2:1) 2009 -2012

## Software Projects

#### Planitt [↗](#)

Nov. 2023 - Present

- Introduced **front-end integration** and **end-to-end testing** using **React Testing Library** and **Playwright**, ensuring robust UI performance and interaction with the Rust/GraphQL data layer.
- Implemented **React custom hooks** for state management and typed schema validation using **Formik** and **Yup**, coupled with **GraphQL** dynamic type/hook generation for completely type-safe fetching of data.
- Built an **interactive SVG visualization** for personal user habits thus enhancing user cognition by leveraging **d3.js (data driven documents)** tree layouts.
- Optimized the UI using Chrome Dev Tools by analysis of heap allocation snapshots to **remove data leaks**, resulting in **smoother performance** via an average heap allocation **decrease of 20%**.
- Implemented Rust-based algorithms within the multi-platform **Tauri** application, and leveraging Rust patterns like **ownership**, **borrowing**, and **concurrency** to enhance performance, achieving a peak response time of under **50ms**.

#### Concept app and presentation for Holochain distributed cloud storage on mobile [↗](#)

May 2023

- Represented **Holochain** at **Volla Community Days**, initiating the first mobile development projects for Holochain that significantly enhanced secure, distributed communication technology integration within Volla products.

## Certifications

#### Holochain & Rust Developer Immersive with Marcus Phillips

March 2022