Troy Cornwall

Contracting Software Developer

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Work Experience

Contracting Technical Lead

Ministry of Education
November 2020 - Present

Led the end-to-end replacement of New Zealand's critical Schools Funding and Staffing allocation system, responsible for distributing ~$2 Billion NZD and allocating ~45,000 teachers annually across all schools and Early Childhood Education providers.

Achievements:

- Led 5 cross-functional development teams with 18 developers at its peak
- Coordinated development efforts across teams to ensure alignment on technical standards, patterns, and integration points
- Mentored developers across all teams on event sourcing, microservices architecture, and modern development practices
- Designed, built and owned the School Domain from creation to release and beyond
- Rolled out an event sourced Microservice Architecture, using DotNetCore, Postgres, Kubernetes and Marten
- Established CI/CD pipelines supporting deployments across a massive number of environments, enabling rapid, safe releases
- Facilitated handover and support for the team supporting Pourato after the project to build it finished

Contracting Senior Software Engineer

Ospri
November 2019 - October 2020

Designing and building services for Ospri's Animal Traceability software

Achievements:

- Designing how Single Sign On will work across the existing applications
- Implementing lazy user migrations so that users can move seamlessly into the new applications
- Updating legacy ASP.NET Forms application with urgent legislation changes
- Increasing Developer Security practices

- Design and roll out an Event Driven Microservice Architecture, using DotNetCore, Postgres, Kubernetes and Marten
- Introduce basic security testing at build time using Owasp ZAP
- Automating SSL Certificate renewals using Let's Encrypt and Azure Application Gateway and Azure Api Management
- Design, Build and Own the Identity Domain. Doing User Registrations and Account Management

Contracting Senior Software Developer

Z Energy
September 2018 - November 2019

Working on a Project team, focusing on integrations for Z's Site Systems.

Achievements:

- Launched Z Cards on Fastlane in December 2018
- Pushed Pumped into Caltex and Z in July 2019, along with a new platform for financial reporting on the loyalty schemes
- Delivered Z Biz Cards on Fastlane in September 2019
- Shipped Sharetank in September 2019, built on top of Pumped

Senior Security Developer

Xero
April 2018 - September 2018

Working on the Identity and Access Team. We implemented an OAuth Server, for user authentication, and process to process authentication

Achievements:

- Working on the Authorization and Authentication platform for Xero Api's and User Logins
- Created applications using DotNetCore to sync user logins between the new system and the legacy login
- Managing infrastructure using Terraform and databases using Flyway
- Worked with Aura for penetration testing of the solution
- Contributed to the DotNetCore Caching Library

Contracting Software Developer

Crombie Lockwood
January 2017 - March 2018

Tech Lead for a Project with Heartland Bank. Quick Quoting Website with deep integrations in their existing CRM. Delivered a second Project to link the Broker's systems with the Underwriters, to remove manual copying and pasting between emails and systems. Enabled automated quoting and approvals using Corticon as a rules engine

Achievements:

- Delivered the Heartland Bank project ahead of schedule
- Turned a bespoke application into resalable white labeled product

- First time Broker and Underwriter systems have been linked in NZ

Software Developer

HealthLink

October 2015 - December 2016

Working on the HealthLink Messaging Client, A DevOps Proof Of Concept, and the National Immunization Register

Achievements:

- Maintained a Java desktop application, deployed to over 14000 sites
- Delivered a Continuous Integration and Delivery POC which reduced the deployment time from 120 minutes down to 4 minutes
- Talked at DevOpsDays Wellington about the human side of DevOps and Change

Software Developer

Spark Ventures

November 2014 - October 2015

Working mostly on the Morepork product team, with occasional projects for the other Ventures, including BigPipe and Lightbox

Achievements:

- Took the Morepork website from an idea to market, using Angular 1 website, JBoss ESB and NodeJS Backend Development
- Reduced Bigpipe deployments from 1 hour 45 mins to 15 mins, and added Release management and the ability to Rollback
- Started the Lightbox Data Warehouse project

Research Assistant

Active Mobile Security

June 2014 - November 2014

Working for one of the University of Auckland's Start ups, helping test a Role Based Access Control platform for Android phones while going thru a pivoting and trying to exit.

Achievements:

- Manual device testing of FireDroid on a mobile device
- Integration Testing of their Rest API
- Contributing to the Docker codebase