

# ALEXANDER BARTLEY NEES

Software Engineer

Palmerston North, New Zealand | [linkedin.com/in/alex-bartley-nees](https://linkedin.com/in/alex-bartley-nees) | [github.com/alex-bartleynees](https://github.com/alex-bartleynees) | [alexbartleynees.com](https://alexbartleynees.com) | [alex@alexbartleynees.com](mailto:alex@alexbartleynees.com) | 0278193553

Talented and passionate software engineer who takes pride and pleasure in crafting beautiful code and learning new skills. 4 years of experience in full-stack software development with expertise in cloud-native architectures, microservices, and observability. Love the feeling of building an application with a team and seeing users get value from it.

## WORK EXPERIENCE

### VALOCITY GLOBAL

Software Engineer | Aug 2021 - Current

#### Front-End Development

- Developed and architected a large-scale Angular application using TypeScript and RxJS
- Led the upgrade from Angular 13 to 20, migrating to modern Angular best practices
- Established coding standards enforced with ESLint and contributed to application architecture decisions
- Led development of a design tokens NPM package using Style Dictionary to provide consistent branding across multiple products

#### Back-End & Microservices

- Built and maintained .NET microservices
- Developed REST APIs with focus on performance and reliability
- Worked on performance optimisation initiatives across multiple services
- Automated infrastructure provisioning and deployment processes using Pulumi and GitHub Actions

#### DevOps & Infrastructure

- Implemented OpenTelemetry instrumentation across Angular frontend and microservices for distributed tracing and observability
- Configured Azure Application Insights, Workbooks, and KQL queries for comprehensive monitoring
- Build and optimised GitHub Actions CI/CD workflows for automated testing and deployment
- Deployed applications to Azure Kubernetes Service using Helm Charts
- Managed Azure infrastructure as code using Pulumi, including deploying open source Pact Broker to Azure Container Apps and provisioning databases
- Managed release cycles with emphasis on reliability and testing

#### Testing & Quality

- Implemented Pact contract testing framework for consumer and provider verification

- Developed integration testing strategies using Docker for reliable, repeatable test environments
- Established comprehensive testing practices across front-end and back-end services

### **Azure Technologies**

- Hands-on experience with Azure Front Door, App Configuration, Container Apps, Azure Kubernetes Service, Azure Functions, SQL Database, Storage Accounts, Application Insights, and monitoring solutions
- Proficient in Azure cloud architecture and infrastructure as code practices

### **KERERU BREWING COMPANY**

Brewer | 2014 - 2019

- Recipe Development - creating award-winning beers
- Won Trophy for Feijoa Weisse at the 2019 Brewers Guild Awards
- Won Champion Small International Brewery at the Australian International Beer Awards 2018
- Worked effectively as part of a team including training new brewers
- Daily operation and oversight of the brewhouse and fermentation process

### **PERSONAL PROJECTS**

#### **HOMELAB & SELF-HOSTED INFRASTRUCTURE**

Ongoing

- Self-hosted Kubernetes cluster on Rocky Linux for containerized application deployment
- Implemented GitOps workflows using ArgoCD for declarative application deployment
- NixOS-based media server demonstrating expertise in declarative system configuration
- Implemented secure authentication patterns using httpOnly cookies in personal web applications
- Implemented observability and monitoring solutions using open-source tools
- Experimented with cloud-native technologies and infrastructure automation
- Hands-on experience with “you build it, you run it” operational practices and container orchestration

### **EDUCATION**

#### **DEV ACADEMY WELLINGTON**

Web Development Bootcamp | Feb 2021 - May 2021

- Developed an understanding of the front-end technologies of React, Redux, Javascript, HTML and CSS and the back-end technologies Node.js, databases, Sqlite3 and PostgreSQL.
- Improved my ability to work and communicate effectively as part of a team through working on group projects each week and pair programming.

## **VICTORIA UNIVERSITY OF WELLINGTON**

Bachelor of Arts in Philosophy | 2019 - 2020

- Victoria University's 2019 and 2020 Dean's List for Academic Excellence.

## **NEW ZEALAND SCHOOL OF MUSIC**

Jazz Performance | 2010 - 2012

- Completed three years of study at the New Zealand School of Music from 2010 - 2012. (Left to pursue employment opportunity).

## **CERTIFICATIONS**

### **AWS CERTIFIED AI PRACTITIONER**

Amazon Web Services | Dec 2025

## **SKILLS**

### **LANGUAGES**

JavaScript/TypeScript, C#, Python, HTML/CSS, SQL

### **TECHNOLOGIES & FRAMEWORKS**

Angular, RxJS, React, Redux, .NET, Node.js, Express.js, Docker, Kubernetes

### **CLOUD & INFRASTRUCTURE**

Azure (Container Apps, AKS, Application Insights, Front Door, App Configuration), AWS, OpenTelemetry, GitHub Actions

### **DATABASES & STORAGE**

SQL Server, PostgreSQL, SQLite3

### **DEVOPS & OBSERVABILITY**

CI/CD pipelines, GitOps (ArgoCD), container orchestration, distributed tracing, monitoring and alerting, Infrastructure as Code (Pulumi)

### **TESTING**

Pact contract testing, unit testing, integration testing, E2E testing, test-driven development

### **OPERATING SYSTEMS**

NixOS, Rocky Linux, Ubuntu, Linux system administration

### **OTHER**

Agile methodologies, design systems, microservices architecture

## **INTERESTS**

My main interests are music, film, Tibetan Buddhism and Buddhist philosophy. I have a keen interest in learning about the world and I love how film can portray experiences and aspects of life that are very different to our own. I also run and practise yoga.

*References available on request.*