

David Williams

Queenstown, New Zealand

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PROFILE

An experienced software engineer with a background in Cloud, DevOps, and SRE with a proven track record of delivering high-quality solutions to complex technical challenges. A graduate of Theoretical Physics from Trinity College Dublin who possesses strong programming and mathematical skills as well as a natural aptitude for problem-solving. An outgoing person with excellent communication and interpersonal skills who thrives in fast-paced, dynamic environments.

EMPLOYMENT EXPERIENCE

Westpac - Platform Engineer - Auckland Nz

October 2023 - Present

- Migrated the organisation's Jenkins pipeline platform from VM to Kubernetes.
- Rolled out the SNYK platform for code scanning and acted as a development advocate for how to best integrate the tooling into the org's wider workflows.
- Migrated Jenkins worker agents from RHEL 7 to RHEL 8, including a rewrite of Chef cookbooks and incorporating immutable infrastructure practices via Packer to minimise changes post production.

Skills: Python, Groovy, Jenkins, Terraform, Chef, Redhat, Terragrunt, VMware, Docker

Contractor - Westpac - Platform Engineer - Auckland Nz

April 2023 - October 2023

- Developed Python and Jenkins automation workflows that reduced team onboarding time from days to minutes.
- Refactored legacy Terraform codebase using Terragrunt, achieving 40% code reduction through DRY principles.
- Enhanced Chef deployment reliability by implementing comprehensive retry mechanisms, decreasing deployment failures by 60%.
- Streamlined platform operations through custom automation tools and self-service capabilities.

Skills: Python, Groovy, Jenkins, Terraform, Chef, Linux, Terragrunt, VMware, Docker

Contractor - IBM - Automation Developer VPC - Dublin

July 2022 - January 2023

- Led a team building automation tooling for Virtual Private Cloud (VPC) operations, adopted by both the VPC and advanced customer support teams.
- Built a Customer Impacting Event (CIE) Slack bot integrating GitHub, ServiceNow, IBM internal email, and PagerDuty into a single interface for incident coordination.
- Built a CI/CD pipeline with Travis CI, pre-commit hooks, and Jenkins, standardising code quality checks across all team projects.
- Wrote a Python CLI to centralise, standardise, and automate common VPC system-operations tasks for the team.

Skills: Golang, Python, Bash, Linux, VPC, Networking, Slack Automations, Containerization, Docker

Coinbase - Software Engineer Custody Team - Dublin

April 2022 - June 2022

- Contributed to a Ruby on Rails crypto custody service securing trillions of dollars in cryptocurrency transactions.
- Refactored a legacy Ruby monolith into a Golang microservice built on Kafka, Temporal, and MongoDB, improving scalability.

Skills: Golang, MongoDB, Kafka, Ruby, Rspec, AWS, Github, Temporal

IBM - SRE IBM Kubernetes Service - Dublin

May 2020 - October 2021

- Led the move to role-based access control for cloud accounts, defining all access as Terraform code.

- Built and expanded Golang automation enabling the team to operate a service spanning hundreds of thousands of machines across 20+ regions.
- Built tooling into the Ansible-based bootstrap process to meet SOC 3 and FedRAMP compliance requirements.
- Automated operations and compliance workflows using Python- and Bash-based Jenkins pipelines.

Skills: Golang, Python, Bash, Linux, Ansible, Kubernetes, CI/CD pipelines, Cyber Security, Compliance, Prometheus, Jenkins, Travis, Github Apps, IBM cloud, logDNA, Terraform, Slack bots

Contractor - IBM - Site Reliability Engineer - Dublin

Sep 2019 - May 2020

- Automated operational workflows with Python, building CLI tools and Slack bots for the team.
- Built a Kubernetes-based version-control system for New Relic alert configuration, reducing configuration drift.

Skills: Linux, Bash, Python, Ansible, New Relic, Kubernetes, Helm, IBM cloud, Git, Travis, Slack

EDUCATION

Trinity College Dublin

2014 - 2018

- B.A. (Mod.) in Theoretical Physics, Upper Second Class Honours.
- Final year project in the area of soft sphere packings, simulated and analysed using Python.

Wesley College Dublin

2008 - 2014

- Leaving Certificate: Achieved 595 points (99th Percentile).

PUBLICATIONS

- Theory of Rotational Columnar Structures of Soft Spheres - Physical Review E volume 99 2019