

Andrew J. O'Rourke

Email: recruitment@montagne.uk **Blog:** <https://montagne.uk> **Telephone:** 07450 494709

LinkedIn: <https://linkedin.com/in/andyor> **GitHub:** <https://github.com/AndrewMontagne>

I am a versatile engineer who can adapt to pretty much any situation or technology stack, capable of teaching myself new skills and improving myself to fill niches in any job role. I've performed roles in the past in a broad spectrum from mobile/game development to data engineering to infrastructure engineering - across a variety of industries and applications.

Skills

- Atlassian JIRA
- Project Management
- Kubernetes
- Python 3
- Rust
- Amazon Web Services
- Linux System Admin
- Java 8
- Web Applications

Working Experience

2022 – 2024

Platform Engineer II, Funding Circle Ltd

- Handled routine upgrades for the organisation's Kubernetes control planes on AWS EKS and the Karpenter node scheduler without downtime to production applications.
- Wrote a tool to automatically drain and delete nodes on Kubernetes clusters using the API Server to automate the process of node rotations in order to eliminate human error.
- Helped in the migration of production applications from Apache Mesos to Kubernetes.
- Evaluated and implemented Kyverno across all clusters alongside a suite of admission/mutation policies to enforce best practices and enable automatic tagging of resources across the clusters for cost attribution and load distribution.

2021 – 2022

Engineer II, LYST Ltd

- Wrote a module for a legacy data pipeline to reformat, verify and forward SKU items from older systems to a modernised system to aid in the transition from the former to the latter.
- Planned and executed an upgrade of a live mission-critical AWS Aurora database from Postgres 9 to Postgres 11, without any downtime, with over 2 TB of data.

2020 – 2021

Web Engineer, Serif (Europe) Ltd

- Migrated the Web CI/CD pipeline from Jenkins to GitLab running on Docker containers
- Built a disposable development environment for the web services using Docker Compose.

2016 – 2020

Software Development Engineer II, Capital One (Europe) plc

- Wrote RESTful web APIs in Java 8 EE using the Spring Boot framework to help bring Capital One in compliance with the PSD2 data portability directive.

2015 – 2016

Software Developer, Barbon Insurance Group Ltd

2014 – 2015

Web Developer, The SaleGroup Ltd

2013 – 2014

Junior Mobile Developer, Reflex Gaming Ltd

Education

2010 – 2013

BSc (Hons) Games Computing, University of Lincoln

Personal Projects

2017 – Present

Space Station 13 – Open Source Video Game

Since Summer 2017, I have been involved in working on a fork of the cult online sci-fi roleplaying game Space Station 13. I was involved in managing the project, working on features and bug fixes, and took on the role of managing the infrastructure and CI/CD pipeline.

The game is written in a niche programming language used only in the game engine it is based on, but I have used Python 3 to write some tooling for it, including a Discord bot which uses a binary protocol over sockets to call functions on the game server itself.

In September 2020, I started a new project to rewrite this 10 year old codebase from scratch to eliminate technical debt and licensing issues, while significantly improving performance by using native binaries written in Rust to offload some of the more complex tasks such as tile-based atmospheric simulation.

2015 – 2020

Asterisk PBX + Cisco Unified IP Phones

After I moved into my new house in 2015, I discovered that I had no cell phone coverage. Rather than pay for expensive landline service when I already had an internet service provider, I set up an Asterisk PBX on my home server, purchasing a Cisco IP Phone 7960 and hooking it up to the PBX using SIP. I presented a talk at NorthernRST 2019 about this project.

2013 – Present

Personal DevOps

In my spare time, to support my personal projects I operate both a leased dedicated server in a London-based data centre, as well as some physical hardware within my house. Currently I run a dedicated rackmount gateway and redundant WAN connections to support my full-time remote working.

I formerly operated a GitLab server for code storage as well as continuous integration as well as various other servers using Docker Compose to manage different dependencies.

I have also been working on setting up a Kubernetes cluster from scratch at home on virtual machines to better understand the technology and improve my skills and knowledge at work. I intend to eventually migrate this cluster to real hardware.

Miscellaneous

Other Projects

Other projects I have worked on include various automation tools to save me work, my own terminal font, an internet radio station and a train timetable website.

Volunteering

2016 – Present

ConFuzzled UK Ltd.

I have been volunteering for ConFuzzled for several years in several roles. Currently, my primary role is the development of an in-house inventory system called “Gubbins” in Python that tracks the lifecycle of articles from when they are ordered to when they are disposed of, as well as budgeting and wishlisting. I handle both Lead Developer and Project Manager responsibilities, with my department head acting as the product owner, and with another volunteer working under me doing general development.

Additionally, I perform manual handling duties to handle goods in and goods out, electrical (PAT) testing of equipment, and co-ordinating Health & Safety on-site.