

CiARAN MCKEY

@ ciaranmckey@gmail.com

+44 7472 557 891

Cambridge, UK

linkedin.com/in/ciaran-mckey

github.com/thewatergategroups

EXPERIENCE

Engineering Lead

Darktrace

Jan 2024 - Present

Cambridge, UK

All technologies from the previous role still apply.

Overview

Leading a team that has broken off from the original Cloud Security team to further Research and Development outside of the core product offering.

Technologies

Golang

Rust

ReactJS

Actions

- Architect, build and deploy all facets of production applications on Kubernetes to serve new product services.
- Working with Product teams to decide on development priorities and assigning tasks and deadlines to team members based on objectives
- Working with UI and UX teams to build new features out in a way that is consistent with the rest of the product and provides value to customers over and above existing offerings.

Software Engineer

Darktrace

Apr 2021 - Jan 2024

Cambridge, UK

Overview

Started on existing offerings within the SaaS space. Wrote the first line and much of the application code on the core Cloud Security product offering for AWS. Took it to market with a team that grew to 11 engineers while managing the production cycles, production debugging, client calls and supporting teams across DevOps, support, Product Development and Internal Development to ensure smooth operation during release.

Moved from working on a monolithic based architecture to a containerised microservice architecture. In doing so we built standards within Darktrace for further microservice development. Ranging from fault tolerance, scaling, resilience, security, CI/CD and customer provisioning and deployment pipelines.

Technologies

Python

Asyncio

Concurrent Futures

PyTest

Uvicorn

FastAPI

SQLAlchemy

Alembic

Celery

Pydantic

PostgreSQL

Redis

Docker

Kubernetes

GitLab CI/CD

Git

AWS DynamoDb

AWS RDS

AWS EC2

AWS EKS

AWS ECS

AWS SQS

AWS IAM

AWS WAF

AWS S3

AWS CloudTrail

AWS Cloudformation

AWS Lambda

AWS API Gateway

AWS Parameter Store

AWS Secrets Manager

EDUCATION

BScEng Hons Computer and Electrical Engineering

University of Cape Town
Grade: 2.1

2016 - 2019

Cape Town, South Africa

PROFICIENCIES

Development

Python
Docker
Application Architect
Linux
Golang
ReactJS
Rust



DevOps

AWS
Kubernetes
System Architect
Helm
FluxCD
ArgoCD
Terraform



Soft Skills

Purposefully left unrated

Communication
Management
Collaboration



Actions

- Architect, Build and Deploy customer facing production single tenant product applications on Kubernetes.
 - Build Authentication mechanisms to ensure customer data separation in production environments.
 - Build customer provisioning pipelines.
 - Help solidify company microservice development best practices within Darktrace.
 - Manage production release cycles.
 - Talk with customers to help them deploy and debug issues.
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System and Backend Developer

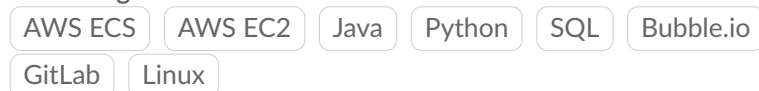
 **Play Well for Life**

 Jan 2020 - Apr 2021

 Surrey, UK

Overview

Technologies



Actions

- Developed and deployed containerised microservices on AWS ECS
- Developed Java based microservice with an SQL datastore
- Worked with microcontrollers to develop hybrid system
- Built CI/CD pipelines
- Built Customer Portal with Bubble.io

HOBBY PROJECTS



Stock Trading Bot.

I have built out a stock trading bot using Alpaca Trading Webhooks and API's, Python, Postgres and Redis. This bot is deployed on Kubernetes through my homelab IDP.



Homelab Internal Developer Platform.

I have been building out my homelab for approximately a year and have ended up with what is essentially an internal developer platform built on kubernetes for the quick deployment of applications. Using mostly open source tooling, as well as a home grown Identity Provider that I built with the aim of understanding in depth OIDC and JWT authentication.

For architecture diagrams and more please go to <https://docs.thewatergategroups.com>

HOBBIES



Rock Climbing



Traveling



Coding