# **lan Duffy**

# **Software Engineer**



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I am passionate about automation, cloud, continuous delivery, infrastructure and security. I want to be part of building great experiences for developers and their applications journeys to production.

# **EXPERIENCE**

#### Present July 2022

# **Senior Software Development Engineer**

#### Workday

Layer

I am a part of a team responsible for developing internal tooling that enables continuous delivery in a compliant manner. Our solution is built using custom Kubernetes controllers that run on top of AWS EKS. We work closely with other teams to ensure smooth integration with their services.

#### May 2022 April 2022

# Senior Infrastructure Engineer

Unfortunately, due to the economic climate, the company was forced to make sudden changes that resulted in my layoff just two weeks after I started.

Since my departure, the company has undergone further layoffs and completely changed its mission.

# March 2022 Aug 2021

# Senior Devops Engineer

#### Spin Scooters

Developed internal tools to streamline software deployment processes. This involved a migration from GitHub to Gitlab. I was heavily involved with developing the terraform and helm configuration for maintaining the GitLab installation and templating CI pipelines.

#### Aug 2021 March 2019

# **Senior Devops Engineer**

# Zyte (Formerly ScrapingHub aka the founders of Scrapy)

Managed infrastructure for Zyte's Data Extraction Service, migrating from Mesos to Kubernetes on GCP. Standardized automation tools (helm, helmfile, sops) and services for zero downtime deployments. Upgraded CI to scale on Google Compute Engine, reducing CI definitions to < 4 lines. Transitioned Apache Kafka to Confluent.Cloud, reducing maintenance burdens. Implemented data pipelines to BigQuery for enhanced analytics.

## March 2019 Apr 2018

#### **Senior Software Engineer**

#### **Shipyard Technology Ventures**

I designed a platform on managed Kubernetes (GCP, AWS, Azure). The platform provided SSL certificate provisioning(cert-manager), monitoring (Prometheus), ingress(ingress-nginx), cloud provider integration via service brokers, and DNS provisioning (external-dns). Tooling was provided via GitLab and Jenkins for executing deployments to the platform.

I build an Identity access management solution on top of Keycloak. This provided single-sign-on via SAML and OpenID for internal applications. Additionally, it was used to supply user management for any developed products.

#### March 2018 Nov 2016

# **Senior Software Engineer**

#### Zalando SE

My focus area centred on extracting fashion insights from the web. My team spearheaded the development of a web crawler tasked with scheduling, fetching, and classifying fashion articles. Using Scala, we built various components linked by Kafka for efficient data streaming, aggregation, and persistence. The system, hosted on AWS, parsed articles to extract date, author, content, and relevant images.

# Oct 2016 Aug 2015

# **Contractor / Senior Cloud Engineer**

#### Allied Irish Banks

Worked on providing a Platform as a service and Continuous Delivery capabilities on top of OpenStack, AWS, and Azure by bringing together many opensource utilities such as Chef, HashiCorp Terraform, and Packer, Jenkins, and ElasticSearch.

#### June 2015 Sept 2013

# (Opensource) Apache Project Management Committee and Committer

#### Apache Software Foundation - CloudStack

Apache Cloudstack is opensource software designed to deploy and manage large networks of virtual machines, as highly available, highly scalable Infrastructure as a Service cloud-computing platform.

My role as a PMC member and committer involved participating on mailing lists, software development, assisting with product growth and community.



#### Comprised the Azure RedHat Enterprise Linux estate

#### Microsoft online services bug bounty

Discovered issues with the RedHat Enterprise Linux (RHEL) update delivery mechanism within Azure that if exploited had the potential to grant full root access to all RHEL virtual machines within Azure. Additionally, a second issue allowed elevation from root on an instance to storage account administrator.



#### **Automated Apache Cloudstack Environment**

Google Summer of Code 2014 – Apache Cloudstack

As part of Google Summer of Code I worked with Apache Cloudstack. It is a private cloud management platform. My project involved using chef and vagrant to automate the creation of a Cloudstack cloud.

The end result provided developers with a straight forward, fast, and easy way to virtualize a full Cloudstack cloud on their machine.

#### LDAP authenticator for Apache Cloudstack

Google Summer of Code 2013 – Apache Cloudstack



This feature involved extending the Cloudstack authentication engine to support LDAP as a backend for authentication. Additionally to this, it provided administrators an automated way to provision their LDAP users onto their cloud.

# **EDUCATION**

## **Dublin City University**

**B.Sc in Computer Applications** 

Throughout my time in DCU I maintained a first class honours (1.1) grade for every academic year.