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Experience

Aug 2021 - Present **Platform Engineer at Ki-Insurance** **London UK/Remote**

Platform engineering in an insurance startup. Part of a small team of platform engineers responsible for the application and developer experience infrastructure of the company. In this role I have built a GitOps platform utilising GKE, flux, terraform and github actions.

Clusters created from code in a multi-tenant setup, application repositories responsible for deployments using github actions and flux in kubernetes.

This platform supports about tens of services and developers who can self-serve using git and github operations.

Feb 2020 - Aug 2021 **Senior Container Platform Engineer at Worldpay/FIS** **London UK/Remote**

Platform engineering for the new global kubernetes platform at Worldpay/FIS. Part of a team of platform engineers, responsible for development, deployment and support of the RedHat Openshift 4(kubernetes) platform. In this role I have worked on Openshift Hive to programmatically deploy new OKD and Openshift multi-region clusters in AWS using Drone CD software and using GitOps methodologies (cluster as code). I have enhanced Openshift operators written in Go, participated in the identity management integration of the company OpenID Connect with Openshift and worked with the team to deliver the PCI platform certification.

Aug 2018 - Feb 2020 **Cloud engineer at Worldpay** **Cambridge UK**

Cloud engineer in an agile-scrum team consisting of developers and QA engineers.

- Designed and implemented the infrastructure for PCI-DSS micro services in AWS cloud.
- Deployment, architecture of an autoscaling webhook delivery service for big finance merchants. Implemented mutual TLS with network load balancing along with vault backends. Achieved high load transaction volumes of over 1000 tps. Springboot app built in Docker containers communicating via Docker Compose networks and using Squid proxies for external traffic control and manipulation (whitelisting, mutual TLS with client certificates for authentication).
- Deployment, architecture of autoscaling RESTful microservice for 3DSv1 and 3DSv2 in Access Worldpay organisation. Delivered PCI compliant and hardened infrastructure to meet financial standards. Custom AMI builds and infrastructure testing with Inspec. Written Terraform modules for reusable deployment components across the company.
- Maintained the shared Centos Golden AMI for the organisation, using Packer to build and Ansible to apply hardening. The Golden AMI is used by 8+ teams to deploy their EC2 infrastructure and serve more than 15 services.
- Owned Pact broker project which includes design, deployment and on-going support for cross company code-design contract patterns and API structure. This service is used by the Access Worldpay teams and also remote teams in the US and in Romania as well as projects based on Google Cloud (bitrise). Tech used: AWS EC2, Terraform, nginx with double configuration listening on two ports for different access levels for internal and external facing ALBs.
- Vault deployment with regional high availability design, and cross-region replication using S3 with versioning enabled.

- CICD tools: Jenkins and Concourse build and deployment pipelines using Bash, Python, Ansible and Terraform extensively.

Jun 2017 - Aug 2018

Infrastructure engineer at Opsview

Reading UK

My role at Opsview involved system administration for the company's infrastructure, including Linux, Windows servers that are hosted on in-house servers as well as on AWS/Azure. I took part in the implementation of DevOps tools such as OpenStack, Gerrit and Jenkins for the CI process. I have led and delivered a company-wide storage move from in-house to the cloud (in SharePoint Online), a tenant email migration in Office365 all without issues. Finally I led the expansion of the OpenStack infrastructure to triple the available capacity in order to provide more resources and flexibility to the developers. I had been commended many times for my eagerness to help, always being one step ahead and for being an excellent team player.

Jun 2015 - Aug 2016

Technical Infrastructure Intern at Opsview

Reading UK

During this time I have been tasked to administer various parts of the company's infrastructure such as the LDAP server, the email systems, as well as create solutions (written in Python) to help automate parts of the infrastructure, such as the telephone systems, initialisation scripts for the OpenStack images and employee facing portals to help with everyday tasks. This role also involved internal support and making sure all the infrastructure bits are monitored and kept up to date.

2011-2014

Freelancing Web Development

Athens, Greece

Along with a designer, a team of two, we have created several customer web sites including dynamic web portals and e-shops. My role was to implement the design for a web framework using open standards such as html, php, mysql. Also I have been the technical administrator for the web servers running the Linux operating system. My role required continuous supervision of the services running along with updating the software in order to prevent malfunctions and attacks. In order to achieve this I have been using the Webmin administration software on Debian servers and have been following the security exploit channels for possible threats. A constant communication with the clients was necessary in order to understand their needs for the projects.

Technical Skills

Kubernetes, GKE, kustomize, Helm Openshift administration Github Actions, Drone, Jenkins, Concourse GitOps, Flux Docker, Terraform, Ansible, Packer Python, Bash, Go Flask/Django, WSGI Apache/Nginx, ufw/iptables	Prometheus/Grafana AWS, GCP Linux system administration Sysdig, Fluentd, Fastly, Cloudflare Vault-HA, Git/Github/Gitlab MySQL/MariaDB/Oracle SQL, pfSense firewall OpenLDAP, python-ldap, MS AD
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Personal Projects

BSc Thesis: *An Ansible implementation of a self-configuring Beowulf cluster of Raspberry Pis in a localised environment for the purpose of distributed computing using Open MPI*

This thesis has been created due to the lack of a way to use the plethora of Raspberry Pis available to my university for distributed computing purposes. The implementation I created and described in this project automates, using Ansible and Bash scripts, the installation of the required services as well as the configuration of all nodes in the cluster with minimal user interaction as the design principle. It uses git and other open source software to organise the cluster and run Python among others using MPI on all of the cluster nodes,

managed by the master node. It also features polling that ensures the cluster will still be functional even if nodes fail, or even if the master fails. The thesis and programming work received a first class mark.

Link to the thesis: <https://files.ledakis.com/picluster.pdf>

Education

2014-2017

First Class Honours BSc in Computing, Coventry University

Modules: Agile Development, Web API Development, Open Source Development, Data and Information Retrieval, Developing the Modern Web, Matlab and Simulink for Science and Engineering Research, Programming Algorithms and Data Structures

2011-2014

Mathematics, University of Athens

Part time studies, course based on theoretical Mathematics

Modules: Calculus 1 and 2, Universal Algebra, Computer Science 1 and 2, Introduction to Operational Research, Philosophy of Mathematics, Epistemology and Didactics of Mathematics, Learning Psychology and Cognitive Psychology