Graham Turner

AWS Certified DevOps Engineer and Python Institute Certified Python Developer

An experienced *Hands On* Senior *DevOps* Engineer and *Python* Developer with **15 years+** experience, including Architecting and delivering **AWS** and **GCP** public cloud hosted *GitOps* solutions based around **Linux**, **Terraform**, **Kubernetes**, *Helm* and **Docker,** alongside developing *Javascript*, **React js**, **Golang** and **ML** applications

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📍 UK Remote, Hybrid Cambridge London   🐙 Github.com/backenddeveloper/cv

Core Skills Profile

Public Cloud	**DevOps**	**Python Development**
AWS, Well Architected, Control Tower, Security Hub, EC2, EKS, RDS, Glue, GCP, GKE	CI/CD, Monitoring, Infrastructure as Code, Configuration Management, Networks, Linux Security	Python 3.12, FastAPI,OpenTelemetry, Poetry, Pytest, PyTorch, Scikit, TensorFlow, Keras, Pandas, Flask
Containerization	**Security**	**Full Stack Development**
Kubernetes, Docker, Nomad, Helm	Pentesting, ISO27001, Auditing Best Practices, vulnerability management	Node, React.js, Next.js, Typescript, TDD, CSS, UI/UX

Work Experience

Senior AI implementation Engineer
Motion Capture Systems 02/2024 – Current ~1 year
- Development, deployment, and tuning of AI image generation systems for Hollywood Film Production
- LLM product accelleration, OpenAI prompt engineering Langchain/Langsmith, HFT, RLHF, Drift analysis
- AWS systems engineering, Sagemaker MLOps, Lambda@Edge, Snowflake, Rekognition, Greengrass
- Designing CI/CD (Kubernetes, GitLab CI, ArgoCD);continuous tuning AutoML pipelines (Kubeflow, Airflow)
- Python development code review, API design, security analysis system/code architecture, test automation

Lead DevOps Engineer
Times Higher Education 01/2023 – 02/2024 ~1 year
- Development of applications in Python 3.12 with FastAPI, OpenTelemetry, TensorFlow, Behave, Pytest
- Developing FullStack Javascript, Node, React, Next.js, Typescript, Webassembly, API integration
- Managing, Provisioning, Migrating HA Cloud Infrastructure, IaC, AWS EC2, ECS, EKS, S3, R53 Terraform
- Architecting shift-left CI/CD pipelines for value delivery, branch builds, on-demand end-to-end testing envs
- Implementing DevOps processes and leading DevOps culture, driving MLOps for security and marketing
- Automating dev-experience using Kubernetes, Docker, K8s Helm, Github Actions and Artifact workflows
- Implementation of monitoring, alerting, self-healing and sys-visibility, Cloudwatch, NewRelic, Prometheus
- In this role **I reduced cloud spend by over 80%** for the company through cost optimisation
- **I implemented the first testable Disaster Recovery Strategy**, after successful incident management
- **I streamlined release management, reducing release time by 60% and release failures by 70%+**
- **I implemented Developer-Ops culture through training, documentation and agile practices**

Technical Lead
Click 04/2022 – 01/2023 ~2 years
- Development of applications in Python 3.10 with Flask, Uvicorn, OpenTelemetry, Airflow, Behave, Pytest
- Development of applications with FullStack Javascript, React, Vercel, WebAssembly (Golang), Typescript
- Implementing DevOps processes and leading DevOps culture, driving CI/CD value delivery, monitoring
- Delivering Highly Available Kubernetes environments based on AWS EKS and GCP GKE with Terraform.
- Automation of developer-experience using Docker, AWS, K8s Helm, Github Actions and Artifact workflows
- AWS cloud administration and governance for ISO27001. EC2, IAM, RDS, Lambda, ControlTower, R53

Lead DevOps Engineer

Optibrium BioPharma 08/2019 – 04/2022 ~3 years
- Developing, implementing and architecting DevOps culture and CI/CD based around AWS automation.
- Operations around HA SRE workflows using Nomad, Kubernetes on AWS, GCP, HELM Docker, Terraform
- Developing and maintating DataScience/ A.I. applications using Python, Golang, Rust and web-assembly.
- Hosting of high volume events streaming workflows using Celery, Spark, Redis, and fullstack Javascript.
- Building of self-healing automated continuously deployed systems based around intelligent monitoring.
- Multi-cloud governance, security testing and auditing. SIEM and monitoring with prometheus and ELK
- WebApp development with Node, Javascript, TypeScript, React, Python Flask and WSGI

Senior DevOps Engineer

E-Skim Technologies 09/2018 – 08/2019 ~1 year
- DevOps and CI/CD administration based on AWS IAM, Route53, EC2, S3, RDS, CloudWatch, CloudFront
- Secure, HA Site Reliability Engineering with Kubernetes, Docker, Vagrant, Ansible, Terraform and Jenkins
- Application development in Java 9, JUnit5, Cucumber, Sonarqube, Apache Tomcat, Spring and Maven.
- Development in PHP 7, PHPUnit, Behat, Javascript, React, Symphony and Vue, Laravel, Lambda
- Development in Python2.7/3.6, unittest, behave/pep8/coverage, Django, Flask, Postgres, Redis, Celery

Senior DevOps Engineer

Capita (UoS) 07/2017 – 09/2018 contract
- Development of an extensive Cloud based (AWS, GPC) and self-managed in DC estate.
- CI/CD, Docker, Vagrant, Kubernetes, Helm, Git-Kube, Jenkins, Jira, Linux, full KVM / container platform
- AWS Automatiion, Terraform, Packer, Rancher, Cloud Formation, Lambda, API Gateway, Cloud Front
  Linux hosting management, RHEL, Ubuntu, Kernel Mod-Dev, Chef, Puppet, Ruby, Python, Perl, Golang
- Application development in Java 9, JBehave, Mockito, Jetty, Spring Boot and Gradle
- Development in PHP 7, PHPUnit, Angular, Javascript, Jasmine, Symphony and Laravel
- Development in Python2.7/3.6, unittest, behave/pep8/coverage, Django, Flask, Cython, Redis Celery

Senior Site Reliability Engineer	Piksel Television	09/2016 – 07/2017 contract
Head of Technology	JSR Research	03/2016 – 12/2016 contract
Technical Architect	Talk Straight Broadband (Talk Talk)	10/2015 – 03/2016 contract
Head of Reverse Engineering	Games Warehouse International	03/2015 – 10/2015 contract
Lead Developer	The JDR Group	12/2013 – 03/2015 ~ 2 years
Lead Pentester	MatrixVision	06/2009 – 12/2013 ~ 4 years
Pentester	RALink	04/2006 – 06/2009 ~ 3 years

Education

The University of York
PGC CyberSecurity, PGDip Computer Science with CyberSecurity, Other and longer qualifications.

The University of Liverpool
CertHE Japanese, Other and longer qualifications
Additional modules: Combinatorics, Mathematical logic and language (including Godel), Statistics for SPSS

The University of Cambridge (Department for continuing education)
CertHE Legal practice for Paralegals, Other and longer qualifications.

The University of Oxford (Department for continuing education)
Other and longer qualifications. Certificates/Short course awards in:
Study, language and work skills, Classical literature and the Bronte sisters, Philosophy of Mathematics

The Open University (19 years)
CertHE Contemporary Science, CertHE Computing and IT, DipHE Mathematics, Bsc Mathematics,
BSc Physical Science, BA Open. Additional CAT bearing modules:
Complex analysis, Mathematical Methods and Models, Fluid mechanics, Advanced calculus and its applications, Quantum Mechanics of Matter, Electromagnetism, advanced Java development.

(ISC)2 Associate of (ISC)2, CISSP - **EC-Council –** CEH - **CISCO** (CCIE) - **JUNIPER** (JNCIE) - **The Chappel University**: WCNA - **OffensiveSecurity** (OSCP, AWAE) - **SANS Institute** (GPEN)
Linux Professional Institute – LPIC-3 (LPIC-2, LPIC-1) - **Zend** Certified PHP developer
CompTIA - A+ Network+ Server+ Security+ Linux+ CyberSecurityAnalyst+