

# Mohammed Ajhar Hussain DevOps Engineer

✉ Hussainajhar8@gmail.com 📍 London, United Kingdom 🌐 github.com/Hussainajhar8

🌐 linkedin.com/in/hussainajhar8 🔗 ajharresume.com

## PROFILE

Cloud enthusiast with a year of cloud experience. **AWS, Azure and Terraform certified**. Graduated from **AWS re/Start** with Primed Talent, mastering fundamentals in **Linux, Python, Networking, Databases, Security, CI/CD**, and **AWS**. Familiar with automating tasks using **Python** scripting and **Terraform**. Comfortable with **Docker** containerization and work involving **AWS, Terraform, CI/CD**, and **Kubernetes**. Completed **The Cloud Resume Challenge** showcasing expertise in essential skills.

## PROFESSIONAL EXPERIENCE

### DevOps Engineer, Sparta Global

February 2024 - Present 🔗

- Collaborated with business teams and developers to deploy a **Flask** application and **MongoDB** database on **AWS** using **Terraform**, implementing **CI/CD with Jenkins**. Ensured accurate releases, comprehensive documentation, and enhanced system reliability while utilising Trello to streamline communication throughout the software development lifecycle.
- Achieved a **27% cost reduction** by **manually deploying Kubernetes** on **AWS EC2 (t2.medium)** instead of utilising **Amazon EKS**, enabling custom cluster configurations and direct resource control.
- Deployed, managed, and scaled a **two-tier** containerised application within the **Kubernetes** cluster leveraging **Docker**.
- Integrated **Kubernetes** deployments with **Jenkins** Pipeline for automated CI/CD, ensuring smooth and continuous rollouts.

### AWS re/Start Graduate, Primed Talent

July 2022 - October 2022 🔗

- Demonstrated **Linux administration** skills, executed **cron** jobs and completed labs for **DNS, Python, Databases** and more.
- Designed **Secure, High-performing, Cost-Effective, Highly Available, and Scalable Systems** using AWS services according to the best practices defined in **AWS's Well-Architected Framework**.
- Gained knowledge in different areas like deployment automation using **Cloud Formation**, **DevOps processes like CI/CD**, Monitoring & logging using **Cloud Watch, Cloud Trail**, and Configuration Management tools like **GIT**.

## PROJECTS

### AWS Cloud Resume Challenge: Serverless Web Portfolio with Visitor Counter and CI/CD, ajharresume.com 🔗

Developed a **serverless** web application, showcasing a dynamic HTML resume with a visitor counter. Utilized various AWS services such as **S3, Lambda, API Gateway, DynamoDB**, and **CloudFront** to build a responsive and secure web portfolio.

- Secured the URL with **HTTPS** using **CloudFront** and **CloudFlare**, ensuring a professional and secure web presence.
- Implemented a visitor counter using **Python** and **DynamoDB** to track and display the number of site visitors.
- **Configured API Gateway and Lambda** to manage interactions between the front end and the DynamoDB database.
- Utilized **Terraform** to deploy the application and define AWS resources in an infrastructure-as-code (IaC) approach.
- Set up **GitHub Actions** for continuous integration and deployment (**CI/CD**) of both backend and frontend codebases.

### 3-Tier Architecture on AWS via Terraform and CI/CD Pipeline 🔗

Hosted an Apache web application on an EC2 server via **Terraform**

- Initial Infrastructure comprised of: a VPC, a public and private subnet, EC2 instances, an RDS instance and a NAT Gateway.
- The EC2 instances were in each subnet with a **NAT gateway** providing SSH access to the private EC2 instance.
- Route Tables & Security Groups were set up to allow incoming traffic to the server.

To improve **reliability, availability, efficiency** and **cost optimization** I added:

- An **application load balancer** with **auto-scaling groups** to distribute load and horizontally scale to meet demands.
- Ensured that provisioned EC2 from ALB ran in separate subnets.
- Provisioned a child RDS database to do reads and failover in case of a failing main database.
- Set up a **GitHub workflow** to further automate changes to infrastructure.

## SKILLS

Linux | Python | AWS | Azure | Terraform | CI/CD (e.g. Jenkins, GitHub Actions) | Docker | Kubernetes

## CERTIFICATES

Azure AZ-900 🔗 | AWS re/Start Graduate 🔗 | AWS Solutions Architect Associate 🔗 | Terraform Associate 003 🔗

## EDUCATION

**Brampton Manor Academy**, A levels from A\* - C, Maths, Further Maths & Physics

**Cumberland school**, Achieved 11 GCSEs from A\* - C, including Maths and English

## INTERESTS

I love learning and experiencing new things. I train in martial arts and occasionally skip for quick cardio and conditioning. I spend a lot of my free time productively whether it's upskilling, reading, exercising or helping out friends and family. I'm currently learning the Arabic language and improving daily by immersing myself in the language and culture.