

Mohammed Ajhar Hussain DevOps Engineer

✉ Hussainajhar8@gmail.com ☎ 07388245405 📍 London, United Kingdom 🌐 github.com/Hussainajhar8
in linkedin.com/in/hussainajhar8 ↗ ajharresume.com

PROFILE

A Cloud enthusiast. **Certified in AWS and Azure.** Completed the **AWS re/Start** with Primed Talent learning fundamentals in **Linux, Python, Networking, Databases, Security, CI/CD** and **AWS**. Experienced in creating workflows and automating tasks with **Bash scripting** and **Terraform**. Experienced in **Containerizing** applications with **Docker** and have utilized **AWS, Terraform, GitLab**, and **Kubernetes** in projects.

PROFESSIONAL EXPERIENCE

AWS re/Start Graduate, Primed Talent

July 2022 - October 2022 🔗

Skills Profile:

- Demonstrated fundamental **Linux administration** skills, designed helpful **bash scripts** and executed **cron** jobs for a variety of different usages.
- 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.

- 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.
- **Secured** the URL with **HTTPS** through **CloudFront** and **Route 53**, ensuring a professional and secure web presence.

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.
- An **RDS** instance was also provisioned to store the data.
- 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 slave RDS database to do reads and failover in case of a failing master database.
- Set up a **GitHub workflow** to further automate changes to infrastructure.

Automated EKS Cluster via Terraform and CI/CD Pipeline 🔗

A web app on an **AWS EKS** cluster using **Terraform** and automated the process with **GitLab**.

- Configured an: **EKS cluster** with an **IAM role** for appropriate permissions,
- A frontend **deployment** resource with the relevant specifications: deployment name, deployment labels, replicas, pod labels, image, container name, and container port,
- A web-app service resource with the following specifications: service name, service type, port, and NodePort,
- Set up a **CI/CD pipeline with GitLab**, which further automated the process by doing the Terraform plan and apply.

SKILLS

Trained: | Linux | Python | AWS | Azure | Terraform | CI/CD | Docker | Kubernetes | Developing: | Go

CERTIFICATES

Azure Fundamentals AZ-900 🔗 | AWS Certified Cloud Practitioner 🔗 | AWS re/Start Graduate 🔗

EDUCATION

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

September 2017 - 2019

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

September 2012 - 2017

INTERESTS

I love learning and experiencing new things. I train in martial arts, spend some mornings cycling around London 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.