MUHAMMAD RAEES

AIOps & DevSecOps Engineer | Cloud Security & DevOps | Kubernetes · CI/CD · MLOps

Islamabad, Pakistan | raees.malik89@gmail.com | +92-316-881-8693

linkedin.com/in/muhammad-raees081489 | github.com/raeesmalik89-oss

Available immediately • On-site at FAST-NUCES Islamabad / Rawalpindi

PROFESSIONAL SUMMARY

AIOps and DevSecOps engineer with an EduQual Level 6 Diploma in Artificial Intelligence Operations (UK, 86%) and a 12-month hands-on job-training programme in cloud infrastructure, Kubernetes, CI/CD, DevSecOps and ML deployment. Strong fit for the Adaptive Social Media Monitoring Watch (ASMW) project: built a real-time Kafka streaming platform (producer → topic → ML consumer → database → dashboard) with sub-second latency, plus a Helm-deployed MLOps pipeline with MLflow and automated retraining. Skilled in Azure (AKS) and AWS, Terraform, Docker/Kubernetes, GitHub Actions, HashiCorp Vault, and Prometheus/Grafana observability — exactly the stack needed to ingest, deploy and monitor ML models on live social-media data streams.

TECHNICAL SKILLS

MLOps & ML Deployment: MLflow, FastAPI, Flask, Streamlit, Python (scikit-learn, TensorFlow, pandas), automated retraining/redeployment, model versioning, Jupyter

Data & Streaming: Apache Kafka (real-time pipelines, partitions, consumer groups), PostgreSQL, REST APIs — directly applicable to social-media data ingestion & monitoring

Cloud: Microsoft Azure (AKS, Azure DevOps, Monitor, Application Gateway, VMs), AWS (EC2, S3, Lambda, RDS, VPC, IAM, CloudWatch, SNS)

Containers & Orchestration: Docker, Docker Compose, Docker Swarm, Kubernetes, Helm, Kyverno

CI/CD & GitOps: GitHub Actions, Azure DevOps Pipelines, Jenkins, GitLab CI, ArgoCD, Git

Infrastructure as Code: Terraform, Ansible, Packer

Observability & AIOps: Prometheus, Grafana, ELK Stack, Datadog, PagerDuty, CloudWatch, Python anomaly detection, auto-remediation

Security / DevSecOps: Zero Trust, Kubernetes hardening (Pod Security Standards, network policies, seccomp/AppArmor, admission controllers), HashiCorp Vault, Keycloak (OIDC), OPA/Rego, Trivy, SAST, IAM

Scripting & OS: Python, Bash, YAML, JSON, Linux (Ubuntu)

KEY PROJECTS

Real-Time AIOps Streaming Platform with Auto-Healing — *AWS EC2*

Kafka • FastAPI • PostgreSQL • Keycloak • OPA/Rego • Trivy • Docker Compose • Python

- Designed an event-driven pipeline (producer → Kafka topic → ML consumer → PostgreSQL → dashboard) processing records every 5 s with <1 s end-to-end latency and 98.4% delivery across 3 partitions — the same architecture required to monitor live social-media feeds.
- Containerised 6 services (ZooKeeper, Kafka, PostgreSQL, Keycloak, FastAPI, ML worker) on an isolated Docker bridge network.
- Secured access with Keycloak OIDC and OPA/Rego authorisation policies; scanned images for CVEs with Trivy.
- Built an auto-heal engine that publishes remediation events to a dedicated Kafka topic when service health drops.

MLOps Pipeline: End-to-End Model Deployment — *Kubernetes / AWS*

Docker • Helm • MLflow • GitHub Actions • Terraform • Flask

- Packaged ML models as containerised Flask APIs and deployed to Kubernetes with Helm using zero-downtime rolling updates.
- Tracked experiments and model versions in MLflow; automated retraining and redeployment with GitHub Actions.
- Provisioned EC2 and S3 model-artifact storage with Terraform modules.

Multi-Tier Cloud Infrastructure Automation — *AWS & Azure*

Terraform • Ansible • Auto Scaling • Load Balancers • CloudWatch • SNS

- Built multi-tier environments with auto-scaling groups, load balancers and VPC security groups; replaced manual deployments with Terraform modules and Ansible playbooks for one-command provisioning.
- Added CloudWatch dashboards and alarms with SNS notifications for proactive incident alerting.

Observability & Anomaly Detection Stack — *Microservices*

Prometheus • Grafana • ELK • Python

- Collected metrics, logs and traces across microservices; wrote Python anomaly-detection scripts that flag performance regressions before SLA breaches.

Al-Falah Islamic Academy — Full-Stack Learning Portal & PWA *Cloudflare Workers*

Supabase (PostgreSQL) • JavaScript • GitHub Actions • Cloudflare Workers • PWA • Python

- Built a multi-role web platform (student / teacher / admin / CEO) on Supabase Postgres, using row-level-security policies to route each user to dashboards for attendance, fees, progress notes and exam report cards.
- Shipped the site as an installable, offline-capable PWA (service worker + manifest) and automated edge deployment to Cloudflare Workers through a GitHub Actions pipeline that publishes on every push to main.
- Added a scheduled workflow to keep the free-tier database awake and a Python (BeautifulSoup) scraper that regenerates the site's free-books catalog.

EXPERIENCE

AIOps / DevOps Trainee (12-month Job Training Program) *Aug 2024 – Aug 2025*

Al Nafi International College — Al Nafi Cloud Platform (enterprise-simulation lab environment)

- Azure & Kubernetes: deployed managed AKS clusters; configured high-availability routing with Traffic Manager and Application Gateway.
- DevSecOps CI/CD: built pipelines in Azure DevOps and GitHub Actions with static code analysis, supply-chain security and centralised secrets in HashiCorp Vault.
- Kubernetes security: hardened the API server, enforced Pod Security Standards and network-policy isolation, and automated policy governance with Kyverno.
- MLOps: built and fine-tuned deep-learning models (Capsule Networks, bagging/boosting ensembles, PCA) and served them through Flask/Streamlit REST APIs.
- Observability: built Prometheus/Grafana monitoring for cloud-native microservices, including security and service-mesh telemetry.

Earlier Career: Healthcare & Pharmacy *2020 – 2024*

Mubarak Hospital • IBD DHQ Hospital Attock (Global Fund/UN MDR-TB programme) • Care Line + Pharmacy • Jameo Pharma

- Regulated, high-accuracy clinical and supply-chain roles: medication safety, compliance audits, and controlled-substance/cold-chain records; maintained patient and adverse-event data in an electronic medical record system.
- Transferable strengths: incident response under pressure, careful documentation, and coordinating many stakeholders across district sites.

EDUCATION

EduQual Level 6 Diploma, Artificial Intelligence Operations (UK) *Sep 2026*

Al Nafi International College, Islamabad | Grade: 86% | AIOps, DevOps, Azure/AWS, Kubernetes security, DevSecOps, MLOps, deep learning, monitoring

Doctor of Pharmacy (Pharm-D) *2020*

Riphah International University, Islamabad

PG Diploma, English Language, NUML (2021) | BA Sociology, University of Sargodha (2015)

ADDITIONAL

Languages: English (Professional), Urdu (Native), Punjabi (Fluent), Arabic (Basic)

Interests: Site Reliability Engineering, cloud security, AI/ML in production, platform engineering