

Abdur Raafeh Mahmood

+923315300111 — raafeh.mahmood@pm.me — Islamabad, Pakistan

linkedin.com/in/raafeh-mahmood — github.com/RaafehM —

credly.com/users/abdur-raafeh-mahmood

Summary

Experienced Software Engineer with 6+ years of expertise in Python backend development, cloud infrastructure, and DevOps. Proven track record of designing and implementing scalable, secure systems for startups and enterprises. Skilled in Python frameworks (Flask, FastAPI), REST APIs, PostgreSQL/MySQL, Redis, and cloud technologies (AWS, GCP, Terraform, Kubernetes). Passionate about building robust, production-ready systems and automating infrastructure to improve efficiency and reliability. Thrives in fast-paced environments with high responsibility and impact.

Experience

Systems Ltd — Islamabad, Pakistan

DevOps Consultant — 03/2025 - Present

- **Kubernetes Deployments:** Standardized and operated a multi-cloud Kubernetes platform on AWS and Azure, enabling reproducible cluster creation, upgrades, and teardown via modular infrastructure blueprints and automation services.
- **Input Validation & Guardrails:** Implemented parameter schemas, pre-flight checks, and policy gates to ensure correct cluster requests; validations prevent misconfigurations before resources are provisioned.
- **CI/CD Pipelines (Azure DevOps):** Built reusable, parameterized pipelines that orchestrate end-to-end cluster workflows, approvals, and environment promotions, with automated quality gates and rollbacks.
- **In-Cluster Services & Zero-Trust:** Automated deployment of platform add-ons and workloads (e.g., databases and monitoring) using Helm charts and curated manifests; enforced zero-trust defaults with least-privilege RBAC, network segmentation, secret management, policy controls, and image/security scanning.
- **Enablement & Continuous Improvement:** Delivered self-service templates, documentation, and iterative feature updates that streamline onboarding and reduce manual effort for application teams.

Frain Pty. Ltd. — Melbourne, VIC

Cloud Engineer/DevOps Engineer — 09/2023 - 08/2024

- **Infrastructure Automation:** Fully automated cloud infrastructure using Terraform, reducing deployment time from 1 week to under 1 hour. Provisioned development, staging, and production environments on GCP, including production-grade cloud databases and serverless infrastructure.
- **CI/CD Pipelines:** Designed and implemented GitHub Actions pipelines for infrastructure automation, GCP services, and mobile application builds (Android/iOS) using EAS.
- **Security & Compliance:** Managed secrets using Google Secrets Manager, enforced cloud security policies, and maintained SOC2 Type 1 compliance.
- **Process Optimization:** Centralized IT systems, established branching policies, and automated versioning and changelog workflows. Set up a database migration pipeline using Kysely and Docker to ensure seamless migrations.
- **Monitoring:** Integrated Sentry and Posthog for monitoring and alerting, ensuring high availability and performance.

GoArt Technology A.Ş — İstanbul, Türkiye

Sr. Infrastructure Engineer — 09/2022 - 09/2023

- **Cloud Infrastructure:** Automated deployment of cloud infrastructure for real-time VR conferencing using Terraform and Kubernetes Kustomize. Managed an AKS cluster, deploying and optimizing

services for scalability and performance.

- **Monitoring & Optimization:** Monitored system performance using NewRelic, ensuring 99.9% uptime. Maintained service versions and firewall rules to meet security standards.
- **Real-Time Systems:** Set up real-time video streaming services (Amazon IVS, Ant Media Servers) and automated Unreal Engine instance deployments for event visual generation.
- **CI/CD:** Implemented Azure DevOps pipelines for automated deployments and testing.

Logo Cyber Security and Network Technologies — İstanbul, Türkiye

Sr. Software Engineer — 08/2021 - 08/2022

- **Network Security:** Implemented high-availability and redundancy for router clusters, VLAN compatibility, and PPPoE functionality. Automated dynamic firewall policies and developed MPTCP-based network aggregation.
- **Automation:** Automated cloud provisioning using Terraform and Ansible. Created a Python templating module for KVM server deployments, enabling efficient management of client machines across GCP, AWS, and private clouds.
- **Backend Development:** Built REST APIs using Flask and FastAPI for device and infrastructure automation backends. Used Nginx and uWSGI to set up proxies and optimize backend services.
- **Database & Caching:** Worked with PostgreSQL and MySQL, and implemented Redis as a memory store and pub/sub message broker.

LOKI — İzmir, Türkiye

Systems Engineer — 07/2017 - 08/2021

- **Network Security:** Automated firewall configurations (iptables, arptables, nftables) and set up dedicated VPNs using OpenVPN, WireGuard, and IPsec. Implemented SD-WAN solutions using MPTCP and IPS/IDS threat detection.
- **Cloud & Automation:** Deployed multi-cloud infrastructure (AWS, GCP, Azure) using Terraform and Ansible. Automated Linux antivirus configurations and integrated systems across platforms (Ubiquiti, Raspberry Pi, Orange Pi).
- **Backend Development:** Built backend systems using Python and Flask to manage network configurations and client deployments.
- **CI/CD:** Set up GitLab pipelines for automated testing and deployment.

Skills

Languages & Scripting: Python, TypeScript, Go, PowerShell, Bash/Shell, YAML, JSON

Backend & API Development: Flask, FastAPI, REST, gRPC, SQLAlchemy, Nginx, uWSGI

Databases & Messaging: PostgreSQL, MySQL, MariaDB, MongoDB, Redis, Redis Pub/Sub, RabbitMQ

Cloud Platforms & Services: AWS, GCP, Azure, EKS, Azure Container Instances, Azure Functions, GCP Cloud Run, GCP Cloud Functions, VPC, Cloud Storage

Container & Orchestration: Kubernetes, Docker, Docker Compose, Helm, kubectl, Kustomize, KVM

Infrastructure as Code & Config Management: Terraform, Ansible, SOPS

CI/CD & Version Control: GitHub Actions, GitLab, Azure DevOps, CI/CD, Git, Github

Monitoring & Observability: Sentry, Posthog, NewRelic

Security & Testing: Metasploit, Wireshark, ZAP, Nmap, W3AF, Trivy, SSL/TLS, Pytest, Terratest, unittest, Pester, cert-manager

Networking & VPN: IPsec, Wireguard, OpenVPN, Nftables, IPtables

Operating Systems: Linux, Debian, Ubuntu, CentOS/RHEL, Alpine Linux

Tools & Platforms: Jira, Postman, Velero, LaTeX

Education

Izmir Institute of Technology — İzmir, Türkiye
Bachelor of Computer Engineering — 07/2019

Languages

English (Fluent), Turkish (Fluent), Urdu (Native)

Certificates

- Hashicorp Certified: Terraform Associate
- Kubernetes and Cloud Native Associate (KCNA)
- Kubernetes and Cloud Native Security Associate (KCSA)