

MUHAMMAD SAMEER FAROOQ

Senior DevOps Engineer

Lahore, Pakistan · +92 306 1170766 · me.sameer.farooq@gmail.com

linkedin.com/in/msameerfarooq · github.com/msameerfarooq · msameerfarooq.netlify.app

PROFESSIONAL SUMMARY

Senior DevOps Engineer with 4+ years across DevOps, cloud infrastructure, and data engineering. Designs and modernizes production AWS environments spanning 50+ accounts with reusable Terraform and Terragrunt frameworks and automated CI/CD across GitHub Actions, GitLab CI, and AWS CodePipeline. Reduced deployment lead time by 60%, optimized ETL pipelines by up to 70%, and cut AWS DMS alert noise by 95% with a serverless, event-driven observability platform. Builds governed data platforms on Lake Formation, DataZone, Redshift, and EMR with TBAC/RBAC and IAM role chaining.

TECHNICAL SKILLS

Cloud & Infrastructure: AWS (EC2, ECS Fargate, ECR, Lambda, Elastic Beanstalk, VPC, S3, CloudFront, SSM, SES, SNS, SQS, RDS), Terraform, Terragrunt

CI/CD & Automation: GitHub Actions, GitLab CI/CD, AWS CodePipeline, Docker, Git, Linux, Bash

Data Platform & Governance: Amazon Redshift, AWS Glue, Athena, DMS, EMR, Lake Formation, DataZone, PySpark, PostgreSQL, MySQL, T-SQL, MongoDB

Observability & Security: Amazon CloudWatch, AWS CloudTrail, DynamoDB, IAM, KMS, TBAC/RBAC

Languages & Frameworks: Python, SQL, Boto3, Django (DRF), FastAPI, Selenium, BeautifulSoup, Pandas, NumPy, TypeScript, JavaScript, Next.js, React, Node.js, C++

PROFESSIONAL EXPERIENCE

NorthBay Solutions · Lahore, Pakistan

Aug 2024 – Present

Senior Software Engineer — DevOps

- Architected multi-tier AWS infrastructure across 50+ accounts using Terraform and Terragrunt, building reusable IaC modules and GitHub Actions workflows that standardized provisioning and reduced drift.
- Engineered AWS data-platform and governance infrastructure across Amazon Lake Formation, Amazon DataZone, Amazon Redshift, and Amazon EMR, implementing Tag-Based Access Control (TBAC), Role-Based Access Control (RBAC), and IAM role chaining to enable governed, secure, and scalable data access.
- Reduced deployment lead time by 60% by engineering automated CI/CD workflows with GitHub Actions and AWS CodePipeline, enabling repeatable, zero-downtime containerized deployments on Amazon ECS Fargate.
- Architected a serverless AWS DMS observability platform with Python Lambda functions, CloudWatch, DynamoDB, and CloudTrail, cutting operational alert noise by 95% via log deduplication and alert aggregation.
- Implemented zero-touch monitoring for AWS DMS migration tasks by dynamically responding to CloudTrail events and configuring CloudWatch subscription filters, achieving 100% monitoring coverage without manual intervention.
- Hardened multi-account AWS networking and security through optimized CIDR allocation, public/private subnet isolation, VPC Peering, granular Security Groups/NACLs, and least-privilege IAM policies.
- Automated AWS Elastic Beanstalk application deployments, building repeatable zero-touch provisioning and deployment workflows that accelerated release cycles and standardized environment configuration.

Strategic Systems International · Lahore, Pakistan

Jul 2022 – Jul 2024

Python Engineer

Sep 2023 – Jul 2024

- Developed high-performance REST APIs using Django REST Framework, optimizing data serialization and request-response cycles to ensure rapid data transmission across distributed systems.
- Delivered client backend services in Django and FastAPI on MongoDB and PostgreSQL.
- Automated backend testing workflows and operational tasks, authoring reusable test suites and integration scripts to eliminate manual verification and accelerate delivery.
- Engineered robust web scrapers and data-extraction pipelines in Python with Selenium and BeautifulSoup, automating extraction, preprocessing, and structuring of multi-source unstructured data.

DevOps Engineer

Feb 2023 – Sep 2023

- Automated cloud infrastructure provisioning across AWS accounts using Terraform, replacing manual configurations with modular, reusable Infrastructure-as-Code modules.
- Architected dynamic GitLab CI/CD pipelines, enabling automated environment switching and zero-downtime containerized deployments via Amazon ECR and ECS.
- Accelerated frontend application delivery by orchestrating static asset deployments to Amazon S3 paired with automated CloudFront CDN cache invalidations.
- Led R&D and technical proof-of-concepts on database versioning frameworks, IaC governance, and PySpark data processing, establishing implementation patterns for engineering teams.

Data Engineer

Jul 2022 – Feb 2023

- Architected analytical data warehouses on Amazon Redshift, implementing optimized columnar schemas and dimensional data models for high data integrity and fast BI query execution.
- Optimized large-scale ETL pipelines by up to 70%, utilizing AWS Glue (PySpark) and AWS Database Migration Service to ingest, clean, and transform data from PostgreSQL databases, transactional logs, and raw CSV files.
- Deployed an AWS Data Lake architecture on Amazon S3, leveraging Amazon Athena for serverless SQL querying, data validation, and automated schema enforcement across disparate datasets.

ML Sense · Lahore, Pakistan

Feb 2022 – Mar 2022

Python Developer Intern

- Enhanced a Django web application, optimizing code for reliability and user experience.
- Developed APIs and scrapers to extract and preprocess data from diverse sources.

SELECTED PROJECTS

- **Serverless DMS Observability Platform** — event-driven observability for AWS DMS migrations; Lambda (Python) auto-configures CloudWatch filters off CloudTrail events for 100% zero-touch coverage; deduplication cut alert noise by 95%.
- **AWS Data Platform Governance** — governed multi-account data platform on Lake Formation and DataZone with TBAC/RBAC and IAM role chaining, serving Redshift and EMR workloads.
- **Multi-Account Infrastructure as Code** — reusable Terraform/Terragrunt platform across 50+ AWS accounts with 20+ domains migrated; drift-free provisioning with hardened networking shipped as code.
- **Zero-Downtime CI/CD Delivery** — GitHub Actions, GitLab CI, and CodePipeline shipping containers via ECR to ECS Fargate with zero downtime, plus S3 + CloudFront frontend releases; 60% faster deployments.
- **Redshift Data Warehouse & S3 Data Lake** — columnar, dimensional Redshift models with Glue (PySpark) + DMS ingestion and an Athena-queried S3 lake; ETL time cut by up to 70%.
- **IoT Intrusion Detection System (TCNN) — Final Year Project** — packet-scanner traffic classified by a Temporal Convolutional Neural Network (Python, scikit-learn) to detect DoS, DDoS, and identity theft; Django + React app.
- **Portfolio Website** — typed Next.js 15 / React 19 / Tailwind CSS site with content as data and CI deploys on Netlify — msameerfarooq.netlify.app.

EDUCATION

FAST NUCES (National University of Computer and Emerging Sciences) · Lahore

2018 – 2022

BS, Computer Science — Dean's List; 14 A grades. Teaching Assistant for Data Structures & Algorithms and Programming Fundamentals.

Research: "AI based Detection of DDoS Attacks in Cloud Computing"; "Data Integrity Risks of IoT in Healthcare" (accepted, International Journal of Scientific Research and Engineering).

CERTIFICATIONS

- Mastering AWS Glue, QuickSight, Athena & Redshift Spectrum — Udemy, 2022 · ICPC Participant, 2022
- SQL Training — Strategic Systems International, 2022 · Azure Cloud Computing, 2020
- Certified Microsoft Innovative Educator — Microsoft, 2020