

Zain Raza Jafri

DevOps & Cloud Engineer • AWS • Terraform (IaC) • Docker & CI/CD • Infrastructure Automation

Lahore, Pakistan | zainjafri4@gmail.com | +92-307-0221316 | github.com/zainjafri4 | linkedin.com/in/zainjafri4

PROFESSIONAL SUMMARY

DevOps & Cloud Engineer with focused cloud and infrastructure experience, backed by solid **backend engineering** foundations. Hands-on in provisioning and operating **AWS environments from scratch**, containerizing applications with **Docker**, and building automated **CI/CD pipelines**. Comfortable working across the deployment lifecycle: **infrastructure, containerization, monitoring, automation, and Linux** environments. Experienced with **Terraform & CloudFormation** for provisioning repeatable **AWS infrastructure as code** across EC2, VPC, ECS, and IAM resources.

KEY ACHIEVEMENTS

- ▶ **Eliminated Persistent Crypto-Mining Malware** — Traced and eradicated malware residing in Docker image cache layers (invisible to container restarts and image rebuilds) that was spiking CPU to 110% and killing containers — resolved over 2 days of systematic investigation on a live production system.
- ▶ **Automated Deployments End-to-End** — Replaced manual SSH/SCP → docker-compose workflows with GitHub Actions CI/CD pipelines, saving ~2–3 hours per release cycle and eliminating human error from production deployments.
- ▶ **AWS Cost Reduction via Right-Sizing** — Used AWS Cost Explorer & Compute Optimizer post-incident to downgrade an over-provisioned EC2 instance from medium to small, directly reducing monthly infrastructure costs after confirming CPU usage had stabilized at under 1%.
- ▶ **Deployed & Maintained 8+ Production Applications** — Provisioned 5 AWS environments from scratch and maintained 3 additional production systems — handling everything from VPC design to containerization, monitoring, and rollback procedures.

PROFESSIONAL EXPERIENCE

Cloud & DevOps Engineer (AWS) | DeveloperTag

December 2025 – Present

- Designed and maintained **CI/CD pipelines using GitHub Actions** integrated with AWS, fully automating build, test, and production deployments — eliminating manual SSH/SCP workflows and saving ~2–3 hours per release cycle.
- Deployed and managed **containerized workloads on Amazon EC2 and ECS**, standardizing Node.js application deployments using Docker multi-stage builds with non-root execution for improved security posture.
- **Led an active security incident response** — Traced persistent crypto-mining malware that survived container restarts, image deletions, and npm overrides; identified the root cause as malicious layers embedded in Docker build cache and fully eradicated the threat.
- Diagnosed and resolved **critical CPU spikes (110% utilization)** and container OOM crashes on production; implemented **rollback procedures and zero-downtime deployment strategies** to keep services available during all release windows.
- Right-sized AWS infrastructure using **Cost Explorer & Compute Optimizer**, downgrading an over-provisioned EC2 instance post-incident and reducing ongoing cloud spend.
- Managed infrastructure using **Terraform**, defining **EC2, VPC, and IAM resources as code** for repeatable and auditable provisioning.
- Set up **AWS CodePipeline** alongside **GitHub Actions** for select workflows, integrating **CodeBuild and CodeDeploy** for fully managed build and deployment automation within AWS.

Cloud & DevOps Engineer | Max ERP

January 2025 – December 2025

- Containerized Node.js applications using **Docker** and contributed to CI/CD workflows, improving deployment consistency and reducing manual release effort across multiple environments.
- Implemented **secure AWS configurations** including IAM roles, VPC isolation, and security group rules; integrated CloudWatch + SNS for real-time monitoring and alerting.

- Set up and managed **Nginx reverse proxy** configurations on EC2 instances to route traffic across multiple services, improving reliability and enabling zero-downtime deployments.
- Supported application deployments using **Docker Compose** multi-service stacks on **AWS EC2**, coordinating backend, frontend, and database containers within a unified deployment workflow.
- Used **Terraform** to manage **infrastructure as code (IaC)** for AWS environments, keeping infrastructure changes version-controlled and consistent across deployments.

Software Engineer | Max ERP

September 2023 – December 2025

- Developed and integrated **RESTful APIs and a Socket.io real-time server** for a multi-branch HRM platform used by thousands of users across enterprise clients.
- **Built core HRM microservices modules** — Invoice Management, Multi-Branch Access Control, Help Desk, and Bulk Import.
- Designed and implemented **(RBAC)** and multi-branch permission logic for complex organizational hierarchies.
- Collaborated with a cross-functional team using **Git workflows, PR reviews, and code reviews** to maintain code quality and catch issues before merge

Full Stack & DevOps Engineer | BytePark Solutions

January 2023 – September 2023

- **Provisioned 5 AWS environments from scratch** using Terraform (IaC) across EC2, EBS, S3, ECS, ECR, and Lambda — ensuring consistent, repeatable, and secure infrastructure across all deployments.
- Containerized and deployed applications on **Amazon ECS and ECR**; managed IAM users, roles, and KMS encryption policies enforcing least-privilege access control.
- Designed **VPC architectures** including subnets, Internet Gateways, route tables, security groups, and NACLs for secure, isolated multi-tier application environments.
- Configured **CloudWatch dashboards and SNS alerts** for proactive monitoring of application health & performance.

PROJECTS

Real-Time Chat Application | github.com/zainjafri4

MERN Stack • AWS • Terraform • GitHub Actions

- Built a full-featured real-time chat application using the **MERN stack with Socket.io**, deployed on **AWS ECS** via **GitHub Actions**, with infrastructure provisioned using **Terraform**.

E-Commerce Platform | github.com/zainjafri4

Node.js • Express.js • MongoDB • REST APIs

- Built a full-featured e-commerce backend using **Node.js and Express.js**, including product catalog, cart management, order processing, and **JWT-based authentication**, backed by MongoDB deployed on **ECS** via **AWS Pipeline**.

TECHNICAL SKILLS

Cloud & Infrastructure: AWS (EC2, ECS, ECR, EBS, S3, Lambda, IAM, VPC, CloudWatch, Compute Optimizer), Terraform

Containers & CI/CD: Docker Compose, Multi-stage Builds, GitHub Actions, AWS CodePipeline, CodeBuild, CodeDeploy

Security & Networking: IAM Policies, KMS Encryption, VPC Isolation, Nginx, Docker Hardening, Malware Incident Response

Languages: JavaScript, TypeScript, Python

Frameworks & Application Dev: Node.js, NestJS, Express.js, React.js, Django, PostgreSQL, MySQL, MongoDB

APIs & Architecture: RESTful APIs, Socket.io, WebSockets, OpenAI API, Stripe API, Microservices, Multi-tenant Systems

CERTIFICATES

- **AWS Certified Solutions Architect – Associate (WhizLabs)**
- CI/CD Pipeline Automation
- Machine Learning with Python

EDUCATION

Bachelor of Science in Computer Science

Virtual University of Pakistan