

JAWAD ABBASI

Senior DevOps Engineer

Islamabad, Pakistan | +92 332 5501123 | jawadabbasi54@gmail.com | linkedin.com/in/jawad-abbasi-573772117

PROFESSIONAL SUMMARY

Senior DevOps Engineer with 7+ years of experience designing, automating, optimizing, and operating AWS platforms for enterprise IoT and renewable-energy applications. Hands-on expertise in Terraform, Bitbucket Pipelines, Jenkins, Docker/ECR, Elastic Beanstalk, Lambda, IoT Core, Aurora PostgreSQL, FinOps, cloud security, and observability. Proven record of reducing AWS costs, improving database efficiency, accelerating CI/CD, implementing short-lived OIDC-based AWS access, and leading reliable production releases and incident response.

CORE TECHNICAL SKILLS

Cloud & Infrastructure: AWS, Terraform, VPC, EC2, Elastic Beanstalk, Lambda, IoT Core, SQS, SNS, Aurora PostgreSQL, ElastiCache, S3, CloudFront, API Gateway, Route 53, ALB, Auto Scaling

CI/CD & Automation: Bitbucket Pipelines, Jenkins, GitHub Actions, AWS CodePipeline, AWS CodeBuild, OIDC federation, Docker, Amazon ECR, Git, Gitflow, Bash, Python

Security & Observability: IAM, WAF, KMS, Secrets Manager, GuardDuty, Amazon Detective, CloudTrail, CloudWatch, SonarQube, SonarLint, Snyk, LogRocket

Platforms & Collaboration: Linux, Nginx, Node.js, React.js, GraphQL/Apollo, PostgreSQL, Redis, Google Maps Platform APIs, Jira automation, Confluence, Slack, Intercom

SELECTED ENGINEERING IMPACT

- Reduced monthly Amazon CloudWatch logging cost from **\$1,788.59 to \$300.74 (83.18%)** by identifying the highest-ingestion log groups, enforcing error-level logging, and eliminating unnecessary SQL, payload, and informational logs while retaining critical diagnostics.
- Optimized the IoT processing architecture by retiring three redundant Lambda workloads, reducing Aurora reader CPU from approximately **30.5% to 15.4% (49.5%)** and reader database load from **0.49 to 0.20 AAS (approximately 60%)** without reducing telemetry throughput.
- Maintained **99.9988%+ Lambda success** across approximately **27.55 million invocations**, with only one NC-to-DB error and no sustained SQS backlog during the measured release window.
- Designed and executed a **100,000-message MQTT load test** across IoT Core, SQS, Lambda, SNS, and Aurora; validated that PostgreSQL connection pooling reduced writer and reader CPU by approximately **40–50%**, stabilized connections, and lowered query latency.
- Reduced AWS spend through RDS and OpenSearch right-sizing/reservations, S3 lifecycle policies, and systematic removal of low-value logs; monitored API consumption and designed caching and scheduling changes to control AccuWeather quota usage.
- Reduced CI/CD execution time through parallel stages, dependency caching, reusable deployment scripts, and selective validation while keeping Bitbucket Pipelines as the primary delivery platform.

PROFESSIONAL EXPERIENCE

Senior DevOps Engineer | Zigron Technologies Pvt Ltd — Islamabad, Pakistan

Jan 2019 – Present

Client: TerraSmart (USA) — enterprise renewable-energy and IoT platform for solar tracking, monitoring, control, and project operations.

- Designed and managed AWS infrastructure across three isolated environments—**Development, Staging, and Production**—supporting React.js, Node.js, serverless, database, and IoT workloads.
- Managed a modular Terraform estate spanning 20+ infrastructure domains and 20+ Lambda functions, including VPC, Elastic Beanstalk, Aurora PostgreSQL, ElastiCache, Cognito, API Gateway, IoT Core, SQS/SNS, S3, and CloudWatch.
- Built and maintained Bitbucket Pipelines and Jenkins workflows for frontend, backend, Lambda, Docker/ECR, and Terraform delivery, with automated non-production releases and controlled production approvals; also worked with GitHub Actions, AWS CodePipeline, and AWS CodeBuild.

PROFESSIONAL EXPERIENCE — CONTINUED

Senior DevOps Engineer | Zigron Technologies Pvt Ltd | Client: TerraSmart (USA)

- Implemented Bitbucket OIDC federation using short-lived AWS credentials, reducing reliance on long-lived access keys in application and infrastructure pipelines.
- Operated an event-driven IoT telemetry pipeline using AWS IoT Core, SQS, Lambda, Redis, and Aurora PostgreSQL to process data from field network controllers.
- Deployed and operated React.js and Node.js services on Elastic Beanstalk with HTTPS, Application Load Balancing, Auto Scaling, rolling updates, health monitoring, Docker, and Amazon ECR.
- Applied cloud security and governance controls using IAM, WAF, KMS, Secrets Manager, Cognito, GuardDuty, Amazon Detective, CloudTrail, and vulnerability scanning through SonarQube, SonarLint, and Snyk.
- Contributed to an AWS Control Tower multi-account migration plan to isolate Development, Staging, and Production while centralizing billing, auditing, identity, governance, and compliance in a management account.
- Built CloudWatch dashboards, alarms, and log-based monitoring; centralized CloudWatch, AWS Health, Bitbucket, Jira, and LogRocket notifications in Slack to improve operational visibility and incident response.
- Led production incident response, troubleshooting, and root-cause analysis; maintained architecture, deployment, recovery, and operational runbooks in Confluence.
- Standardized Gitflow, branch restrictions, repository permissions, release tagging, Jira sprint/release workflows, and automation rules across application repositories.
- Developed Bash and Python automation for application releases, Lambda packaging, Docker image builds, AWS operations, SSM parameter retrieval, and Terraform workflows; monitored Google Geocoding, Maps JavaScript, and Places API usage and billing.

DevOps Intern | Zigron Technologies Pvt Ltd — Islamabad, Pakistan

Oct 2018 – Jan 2019

- Supported AWS infrastructure, Linux administration, Docker-based deployments, CI/CD pipelines, monitoring, and production support under senior engineer guidance.

Network Administrator Intern | Pakistan Television (PTV) — Islamabad, Pakistan

Jul 2017 – Oct 2017

- Supported LAN infrastructure, network-device configuration, connectivity troubleshooting, system administration, and end-user hardware/software support.

TRAINING & CERTIFICATIONS

Cyber Attacks and Investigation Workshop | Capital University of Science & Technology | Mar 2018

CCNA Training Certificate | Corvit Institute, Rawalpindi | Jul 2017 – Sep 2017

Linux Training Certificate | Corvit Institute, Rawalpindi | Jul 2017 – Sep 2017

EDUCATION

Bachelor of Science in Computer Science | Capital University of Science & Technology | 2014 – 2018

Intermediate in Computer Science | Punjab Group of Colleges | 2012 – 2014