

JERIN RATHNAM

Senior DevOps Engineer | Platform & Cloud Infrastructure

+91 8903273863 | jerinrathnam.gem@gmail.com | Coimbatore, TN, India

LinkedIn: [linkedin.com/in/jerin-rathnam](https://www.linkedin.com/in/jerin-rathnam) | GitHub: github.com/jerinrathnam

PROFESSIONAL SUMMARY

DevOps Engineer with 4+ years of experience designing scalable, secure, and highly available cloud infrastructure across AWS and GCP environments. Skilled in Kubernetes (EKS/GKE), Terraform, CI/CD automation, observability, and cloud security. Proven experience managing production-grade microservices and AI workloads, improving deployment reliability, reducing infrastructure costs, and implementing zero-downtime deployment strategies. AWS Certified Solutions Architect and HashiCorp Terraform Associate with strong expertise in infrastructure automation, platform engineering, Site Reliability Engineering (SRE), and incident management.

CORE ACHIEVEMENTS

- Reduced cloud infrastructure costs by 30% through AWS networking optimization and private endpoint implementation.
- Managed and supported 18 production EKS clusters across multiple environments and applications.
- Implemented zero-downtime Kubernetes deployment strategies for AI and microservices workloads.
- Automated infrastructure provisioning and CI/CD workflows across AWS and GCP using Terraform and GitLab CI/CD.
- Led production incident recovery involving 14k authentication tokens using Python automation and AWS data recovery workflows.

SKILLS

- **Cloud Platforms:** AWS, GCP, Azure
- **Container & Orchestration:** Kubernetes, Docker, Helm, Argo CD, ECS/Fargate, EKS, GKE
- **Infrastructure as Code:** Terraform (Modules, Atlantis, TFLint), CloudFormation, Ansible
- **CI/CD & Automation:** GitLab CI/CD, Azure DevOps, AWS CodePipeline, GitOps, Argo CD
- **Monitoring & Observability:** Prometheus, Grafana, AWS CloudWatch, OpenSearch
- **Security & Compliance:** HashiCorp Vault, AWS IAM, AWS Config, AWS Audit Manager, AWS Network Firewall, AWS Cognito, AWS WAF, Checkov, Bandit
- **Networking:** AWS VPC, ALB/NLB, Client VPN, Managed Active Directory
- **Scripting:** Python, Node.js, Bash

CERTIFICATIONS

- AWS Certified Solutions Architect - Associate (SAA-C02) | Issued: Jan 2022
- HashiCorp Certified: Terraform Associate (004) | Issued: Mar 2026

WORK EXPERIENCE

DevOps Engineer

Nielsen Media | July 2024 - Present

- Managed 18 production EKS clusters supporting multiple applications as part of a 2-person platform engineering team.
- Migrated 40+ Node.js Lambda functions to ExpressJS services on EC2 Auto Scaling Groups, improving scalability and reducing cold-start latency.
- Centralized application logging into AWS OpenSearch to improve observability, incident troubleshooting, and operational monitoring.
- Managed multi-environment AI workloads on Kubernetes (EKS), implementing zero-downtime rolling deployments across production and non-production environments.
- Led recovery of 14k authentication tokens from DynamoDB during a production incident using Python log processing, Athena queries, and EMS-encrypted restoration workflows.
- Reduced infrastructure costs by 30% by implementing VPC private endpoints for Kinesis and Firehose workloads, eliminating unnecessary NAT Gateway traffic.
- Designed GitLab CI/CD pipelines for iOS and Android applications, improving deployment reliability and release automation.
- Implemented DORA metrics tracking to measure deployment frequency, pipeline stability, and change failure rates.
- Provisioned and maintained self-hosted macOS GitLab runners for mobile platform builds, improving build reliability and reducing third-party CI dependency.
- Automated ECS/Fargate and EKS infrastructure provisioning using Terraform, ensuring scalable and consistent infrastructure deployments.

DevOps Engineer

EasyDeploy Technologies | June 2022 - July 2024

- Managed scalable multi-environment infrastructure across AWS and GCP using modular Terraform architectures.
- Reduced deployment time by 70% and Terraform code duplication by 50% through reusable infrastructure modules and automation standards.
- Architected highly available cloud environments using ECS/Fargate, RDS, ALB/NLB, Lambda, and API Gateway services.
- Implemented disaster recovery and backup strategies using automated RDS snapshots and cross-region failover configurations.
- Deployed and managed Kubernetes platforms on EKS and GKE using Helm charts for Prometheus, Grafana, Thanos, Ingress Controllers, and Cluster Autoscaler.
- Improved Terraform collaboration workflows by migrating from Terraform Cloud to Atlantis infrastructure automation.
- Automated cross-account ECS and EC2 deployment pipelines using Python-based Lambda automation and CloudFormation.
- Engineered HashiCorp Vault infrastructure for centralized secrets management and automated credential rotation across AWS, GCP, and Kubernetes environments.
- Improved observability and reliability through centralized monitoring, logging, and infrastructure automation practices.

AWS DevOps Engineer

Freelancer | April 2021 - April 2022

- Developed Terraform and CloudFormation templates for automated AWS infrastructure provisioning across multiple client environments.
- Deployed Kubernetes workloads on EKS and EC2-based clusters using Helm-based deployment workflows.
- Automated operational tasks using Python, Bash, AWS Systems Manager (SSM), and Lambda functions.
- Built Prometheus and Grafana monitoring platforms for infrastructure observability, alerting, and reliability tracking.
- Managed EC2 configuration automation using Ansible for persistent infrastructure consistency.
- Standardized Terraform workflows in AWS to improve deployment speed and infrastructure reliability.

PROJECTS

AWS Multi-Account Architecture with Blue/Green Deployment

- Designed and implemented a multi-account AWS architecture using Control Tower and AWS Organizations.
- Implemented blue/green deployment strategies across regions to support zero-downtime releases and disaster recovery testing.
- Deployed containerized microservices on ECS/Fargate using ALB/NLB and API Gateway integrations.
- Implemented AWS Cognito authentication and ECR lifecycle policies for secure mobile backend deployments.
- Built globally distributed Aurora PostgreSQL infrastructure with automated backups and cross-region failover for high availability.
- Configured CloudFront and AWS WAF to improve application security and performance.
- Implemented network security controls using AWS Network Firewall, Firewall Manager, and Client VPN.
- Integrated ECS logging with OpenSearch and Grafana to improve observability and alerting workflows.
- Automated compliance validation using AWS Audit Manager and AWS Config rules.
- Provisioned self-hosted Azure DevOps agents on EC2 with TFLint and Checkov for infrastructure security scanning.

EDUCATION

Bachelor of Science - Chemistry
Bharathidasan University | 2015 - 2018

AWARDS

- Best Performer Award – EasyDeploy Technologies (Oct 2023)