

Sahithi Aekka

Cloud and DevOps Engineer

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SUMMARY

Cloud and DevOps Engineer with 2+ years of experience modernizing enterprise banking systems through Kubernetes-based orchestration, CI/CD automation, and AWS cloud architecture. Experienced in building resilient, production-grade distributed systems, strengthening release reliability, and driving cloud transformation initiatives in high-availability financial environments.

PROFESSIONAL EXPERIENCE

DevOps Engineer, Tata Consultancy Services | India Jul 2021 - Dec 2022

- Engineered high-availability **AWS hosted Linux** workloads within hybrid cloud infrastructure, optimizing Kubernetes resource allocation to reduce compute costs by 22% while sustaining 99.95% uptime.
- Automated deployments for containerized applications using **Jenkins** CI/CD pipelines and **Git**, reducing release cycle time by 45% across staging and production environments.
- Implemented root-cause analysis for cloud-hosted workloads using centralized logging with **ELK Stack**, decreasing MTTR to under 30 minutes during high-severity incidents.
- Enhanced distributed streaming pipelines on AWS-hosted clusters using **Apache Kafka**, reducing end-to-end event latency to under 200 milliseconds during peak transaction windows.
- Strengthened resilience of financial microservices by implementing broker replication and self-healing deployments on **Kubernetes**, ensuring uninterrupted processing of millions of daily transactions.

Cloud And DevOps Intern, Netcracker Technology Jan 2021 - Jun 2021

- Provisioned development infrastructure using **AWS EC2, S3, and IAM**, enabling environment readiness within 2 hours for new project teams across multiple internal applications.
- Automated build and deployment workflows using **Jenkins** and **Git**, reducing release validation cycles by 30% across staging environments supporting microservice-based applications.
- Containerized internal applications with **Docker** on **Linux**, eliminating environment drift and decreasing deployment-related defects by 18 tickets per quarter in QA testing phases.
- Implemented monitoring and log tracking using **Amazon CloudWatch** and **Shell scripting**, cutting manual health-check efforts by 6+ hours per week across shared development clusters.

EDUCATION

University Of Michigan - Master Of Science, Computer Science Dec 2024

PROJECTS

Cloud Solutions Architect Aug 2024 - Mar 2025

- Designed a microservices-based Library Management System as part of graduate cloud architecture coursework, deploying containerized services on Amazon ECS Fargate and validating scalability for 5,000+ simulated concurrent users.
- Automated CI/CD and Infrastructure as Code using AWS CodePipeline and AWS CloudFormation, achieving sub-10-minute deployments while maintaining 99.9% availability with Amazon Aurora PostgreSQL (Multi-AZ) in a simulated production setup.

DevOps Engineer Jul 2025 - Aug 2025

- Built a complete CI/CD pipeline using AWS CodePipeline, AWS CodeBuild, and GitHub, implementing blue-green deployments with AWS CodeDeploy to achieve 95% deployment success during controlled release simulations.
- Provisioned scalable infrastructure using Terraform for EC2, Auto Scaling Groups, and Application Load Balancer, improving build efficiency by 40% through optimized multi-stage Docker builds in a test environment.

AWS Cloud Solutions Architect Jan 2025 - Mar 2025

- Architected a globally distributed static web platform using Amazon S3 and Amazon CloudFront, benchmarking sub-100 ms latency across multiple geographic regions under load testing scenarios.
- Developed a serverless backend with Amazon API Gateway, AWS Lambda, and Amazon DynamoDB, incorporating monitoring via Amazon CloudWatch and designing for 99.99% availability using Route 53 failover simulation.

SKILLS

Cloud & Infrastructure : AWS EC2, ECS Fargate, S3, Aurora PostgreSQL, DynamoDB, Lambda, API Gateway, CloudFront, Route 53, Hybrid Cloud Architecture, High Availability Design, Auto Scaling

Containerization & Orchestration : Docker, Kubernetes, Microservices Architecture

Infrastructure as Code (IaC) : Terraform, AWS CloudFormation, Infrastructure Automation

CI/CD & Version Control : Jenkins, AWS CodePipeline, AWS CodeBuild, AWS CodeDeploy, Git, GitHub, Blue-Green Deployments, Rolling Updates

Monitoring & Observability : Prometheus, Grafana, ELK Stack, Amazon CloudWatch

Streaming & Distributed Systems : Apache Kafka

Operating Systems & Scripting : Linux, Shell Scripting

CERTIFICATIONS

AWS Certified Solutions Architect - Associate, Amazon Web Services

AWS Cloud Support Associate Specialization, Amazon Web Services (Coursera)

AWS AI Practitioner - Foundations Of Responsible AI, Amazon Web Services