RUCHITHA KURAPATI

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Professional Summary

Software Engineer with **4+ years of experience** building and operating **scalable, reliable cloud platforms** in production environments. Strong background in **AWS compute and networking**, containerized microservices, CI/CD automation, infrastructure reliability, and observability. Proven ability to **reduce deployment friction, improve system resilience, and lead incident response** while maintaining a high engineering quality bar. Experienced in partnering with product engineers to deliver **self-service infrastructure platforms** that improve velocity, cost efficiency, and operational excellence.

Technical Skills

Cloud Infrastructure: AWS (EC2, VPC, ALB/ELB, S3, RDS, IAM, CloudWatch), Cloud Networking, Compute Optimization
Containers & Orchestration: Docker, Kubernetes (foundational), Service Deployment Patterns
Infrastructure as Code: Terraform (foundational), Environment Provisioning, Reproducible Infrastructure
Backend & Platform: Java, Spring Boot, Microservices, REST APIs, Platform Services
CI/CD & Automation: Jenkins, GitHub Actions, Maven, Gradle, Automated Testing, Rollbacks
Observability & Reliability: Prometheus, Grafana, Splunk, Logging, Metrics, Alerting, Incident Response
Datastores: PostgreSQL, MySQL, MongoDB, Redis, DynamoDB
Engineering Practices: TDD, Code Reviews, Secure Design, On-Call Support, Agile/Scrum
Frontend (Supporting): React, Angular, HTML, CSS

Professional Experience

Software Engineer – Cloud & Platform, **American Express**, Texas, USA   Jan 2025 – Present

- Designed and operated **cloud-native platform services** on AWS supporting mission-critical financial workloads with **99.95% uptime**.
- Built and maintained **containerized microservices and shared platform components**, enabling consistent deployment patterns across teams.
- Developed **self-service CI/CD pipelines** using Jenkins and GitHub Actions, reducing deployment time by **40%** and minimizing manual errors.
- Partnered with application teams to identify development lifecycle friction and introduced **standardized service templates and deployment guardrails**.
- Led **high-severity production incident response**, improving runbooks, alerting, and post-incident reviews; reduced **MTTR by 30%**.
- Implemented **observability foundations** (metrics, logs, alerts) using Prometheus, Grafana, and Splunk to proactively detect regressions.
- Optimized compute and database usage across EC2, RDS, DynamoDB, and MongoDB, achieving **20% infrastructure cost reduction**.
- Automated operational tasks including environment setup, deployments, and health checks, improving reliability and repeatability.
- Collaborated with Infrastructure, SRE, Security, and Product teams to evolve platform capabilities aligned with business priorities.

Java Full Stack Engineer (Platform-Adjacent), **Deloitte**, India   Dec 2019 – Jul 2023

- Developed and maintained **Spring Boot microservices** supporting large-scale enterprise platforms with **500k+ daily requests**.
- Built **shared backend services and APIs** used across teams, improving reuse and architectural consistency.
- Supported **cloud deployments and CI/CD pipelines**, enabling automated builds, testing, and releases; reduced release cycles by **25%**.
- Worked on environment provisioning, configuration management, and deployment troubleshooting across dev,

QA, and production.

- Implemented **monitoring and alerting** using Grafana, Prometheus, and Splunk, reducing incident resolution time by **30%**.
- Participated in architecture and design discussions, contributing to **scalable and reliable system designs**.
- Resolved real-time production issues involving network latency, service failures, memory leaks, and API bottlenecks.
- Practiced **TDD, code reviews, and secure coding standards**, improving long-term maintainability.

Achievements

- Improved deployment velocity by **40%** through CI/CD automation and standardized platform tooling.
- Reduced **MTTR by 30%** via improved observability and incident response practices.
- Achieved **20% cloud cost optimization** through compute right-sizing and caching strategies.
- Built predictive analytical models with **90% accuracy**, demonstrating strong problem-solving and data analysis skills.

Education

Master of Science in Computer Science - University of Central Missouri, Missouri
Bachelor of Technology in Computer Science - Veltech University

Certifications

- **Microsoft Certified:** Azure AI Fundamentals (AI-900)
- **Microsoft Certified:** Power BI Data Analyst (PL -300)
- **Java Full Stack Developer** - Coursera
- **Frontend Developer Certification** - HTML, CSS, JavaScript, React, Git
- **IBM:** Python for Data Science, AI & Development
- **Introduction to HTML5**