

PRATHIK MARNENI

Senior DevOps Engineer

Atlanta, GA • (360) 292-5026 • saiprathik29@gmail.com

[LinkedIn](#) • [Portfolio](#)

SUMMARY

Senior DevOps Engineer with 5+ years of experience architecting scalable cloud infrastructure for high-traffic applications. Expert in Kubernetes orchestration, Infrastructure as Code, and zero-downtime deployment strategies. Delivered measurable business impact through 85% faster deployment cycles, Significant cost optimization, and 99.9% system reliability. Proven ability to scale distributed systems handling millions of requests while maintaining security and compliance standards.

TECHNICAL SKILLS

Cloud Platforms: AWS, Azure, Google Cloud Platform

Infrastructure as Code: Terraform, CloudFormation, ARM Templates, Ansible

Container Orchestration: Kubernetes, Docker, Helm, Istio

CI/CD Tools: Jenkins, GitHub Actions, Azure DevOps

MLOps & AI: MLflow, DVC, GPU Infrastructure, Model Deployment, Machine Learning Pipeline

Monitoring: Datadog, Prometheus, Grafana, ELK Stack

Security: AWS Config, HashiCorp Vault, IAM

Programming: Python, Go, PowerShell, Bash, SQL

Databases: MySQL, PostgreSQL, MongoDB, Redis

Operating Systems: Linux, Windows Server

PROFESSIONAL EXPERIENCE

Global Payments

Atlanta, GA

Senior DevOps Engineer

January 2022 - Present

- Architected and maintained **CI/CD pipelines** using **Jenkins** and **GitLab CI** for **microservices**, achieving **60% reduction** in deployment time and enabling **zero-downtime releases** for payment processing systems
- Managed multi-region **AWS infrastructure** using **Terraform**, maintaining **99.9% uptime** for critical payment systems while ensuring **SOC 2** and **PCI compliance** standards
- Deployed and scaled **Kubernetes clusters** on **EKS** with intelligent **auto-scaling**, handling varying API loads with consistent **sub-200ms response times**
- Established comprehensive **security frameworks** using **AWS Config** and custom policies, contributing to **SOC 2 Type II certification** achievement
- Engineered centralized **secrets management** using **HashiCorp Vault** and **AWS Secrets Manager** with scheduled rotation, eliminating hardcoded credentials across **50+ applications**
- Developed advanced **monitoring and alerting systems** using **Datadog** and **Prometheus**, improving incident response time by **40%** and preventing critical outages
- Led strategic **cost optimization** initiatives through resource rightsizing and scheduling, achieving **25% reduction** in annual cloud costs while maintaining performance
- Designed robust **disaster recovery architecture** with automated failover capabilities, meeting aggressive **RTO of 15 minutes** and **RPO of 5 minutes**

- Built scalable **ML infrastructure** on **GPU instances** with **auto-scaling** to support **fraud detection models** processing **1M+ transactions daily**
- Deployed comprehensive **MLOps workflows** using **MLflow** and **Kubeflow**, enabling streamlined model deployments and **A/B testing** for data science teams
- Developed security-focused **CI/CD practices** with comprehensive **vulnerability scanning**, reducing security findings by **70%**
- Containerized **30+ applications** using **Docker** and deployed to **EKS clusters** with **Helm charts**, improving deployment consistency and rollback capabilities
- Mentored **5 junior engineers** and collaborated with development teams using **Agile methodologies**, improving team productivity by **30%**

TEKWORKS Digital Pvt Ltd

Hyderabad, India

DevOps Engineer

July 2019 - July 2021

- Managed comprehensive **Azure cloud infrastructure** for enterprise applications serving **10,000+ business users**, utilizing **Infrastructure as Code** practices
- Built efficient **Azure DevOps pipelines** for **Java** and **.NET applications** with continuous testing, utilizing **blue-green deployments** to reduce risks by **50%**
- Led complex **database migration projects** from **on-premises SQL Server** to **Azure SQL Database**, ensuring **100% data integrity** and minimal disruption
- Deployed production-ready **AKS clusters** with **Istio service mesh**, supporting **microservices architecture** with enhanced security and monitoring
- Developed robust **identity management solutions** integrating **Active Directory** and **Office 365**, supporting authentication across **15 business units**
- Applied comprehensive **security hardening** using **CIS benchmarks** and continuous compliance monitoring, significantly improving security posture
- Created intelligent **automation scripts** using **PowerShell** and **Python**, reducing manual infrastructure tasks by **80%**
- Built reusable **Terraform modules** and configured **VM Scale Sets** with **auto-scaling**, ensuring **99.5% application availability**
- Established comprehensive **monitoring** using **Azure Monitor** and **Application Insights**, providing deep visibility into application performance
- Created detailed **technical documentation** and architectural guidelines, facilitating knowledge sharing and ensuring compliance standards

EDUCATION

Master of Science, Computer Science

2022

Auburn University, Montgomery, AL

Bachelor of Technology, Electronics & Communication Engineering

2020

GITAM University, Visakhapatnam, India

CERTIFICATIONS

- AWS Certified Solutions Architect – Associate
- Microsoft Endorsed: Azure DevOps Engineer Expert
- Microsoft Accredited: Azure Administrator Associate