Vibhav A M

Site Reliability Engineer | Kubernetes | AWS | Platform Engineering

(+91) 9353436006 | amvibhav@gmail.com | linkedin.com/in/vibhav-a-m

Targeting Site Reliability Engineering / Platform Engineering role focused on Kubernetes, Cloud-Native Infrastructure and AI-Driven Automation, to drive scalable system reliability, optimize cloud costs and build next-generation AI-Ops platforms integrating CI/CD and observability preferably in Bangalore & Hyderabad.

Core Competencies

- Cloud-Native Infrastructure Management
- Infrastructure as Code (IaC)
- Platform Reliability Engineering
- Automation & Workflow Orchestration
- Performance Engineering & Optimization
- High Availability & Disaster Recovery
- Observability & Monitoring
- Incident Response & Root Cause Analysis
- Release Management & Deployment

Technical Skills

- **Cloud & K8s:** AWS (EKS, EC2, S3, CF, Route53, MSK, RDS, Lambda), Kubernetes, Docker, Helm, Terraform, Karpenter
- **CI/CD & Automation:** Jenkins, GitLab, Groovy, Python, Shell, GitOps (ArgoCD), N8N
- **Observability & Reliability:** Dynatrace, New Relic, Prometheus, Grafana, Langfuse, Incident Management, RCA, SLO/SLI
- **AI-Ops & Platform Engineering:** Agentic AI, Model Context Protocol (MCP), Prompt Engineering

Education

2019-2023
B.E. in Information Science and Engineering
National Institute of Engineering, Mysuru

Certification & Hackathon

- **Certified Kubernetes Administrator (CKA) | The Linux Foundation, Apr'26**
  Validated expertise in Kubernetes cluster architecture, security, troubleshooting and administration.
- **Winner | Halodoc AI Hackathon, Sep'25**
  Developed a pioneering Agentic AI platform integrating Jenkins, Kubernetes and GitLab via MCP, recognized for technical excellence in bridging LLMs with infrastructure management.

Profile Summary

- **Site Reliability Engineer (SRE II) with over 3 years of experience** in Kubernetes, AWS (EKS, EC2, RDS, MSK) & cloud-native platform engineering, delivering high-availability, scalable infrastructure solutions.
- **Proven track record in GitOps (ArgoCD), CI/CD automation (Jenkins, GitLab) and canary deployments,** reducing deployment effort by 60% and minimizing production downtime.
- **Strong expertise in observability and reliability engineering**, leveraging Prometheus, Grafana and New Relic to drive 80% reduction in incident recurrence and improve SLO/SLI compliance.
- **Led strategic initiatives** including zero-downtime Kafka (MSK) migration, Graviton-based cost optimization (30% savings) & Kubernetes performance tuning, enhancing system resilience & efficiency.
- **Built innovative AI-Ops and Agentic AI platforms** using Model Context Protocol (MCP) to automate debugging, CI/CD reviews and developer workflow, positioning as a forward-looking engineer at the intersection of SRE and AI-driven automation.

Work Experience

Feb'23-Present | Site Reliability Engineer II | Halodoc, Bangalore

Growth Path: Intern ⟶ Site Reliability Engineer I ⟶ Site Reliability Engineer II

Key Highlights:

- Managed GitOps-driven production EKS clusters via ArgoCD, reducing deployment effort by 60% and operationalizing Canary rollouts (20% → 100%) with automated health gates for minimal downtime.
- Implemented Nodeswap, a kernel-level Kubernetes enhancement, cutting memory-pressure pod restarts by 75% and deploying on-demand heap dump and CPU profiling tools to accelerate RCA by 50%.
- Executed zero-downtime, blue-green Kafka migration from ZooKeeper to KRaft on Amazon MSK, ensuring 100% data consistency across mission-critical messaging streams.
- Built an Agentic AI orchestration platform using the Model Context Protocol (MCP) to integrate Jenkins, Kubernetes and GitLab, assisted debugging and reducing developer tool switching.
- Implemented Langfuse to establish a production-grade AI observability stack, introducing granular tracing for LLM requests to track latency, cost and prompt performance across agentic workflows.
- Automated Android/iOS library updates and security audits through Agentic AI, generated MRs with impact reports and integrated an LLM-based CI/CD review layer to enforce architectural and security standards, enhancing development velocity.
- Directed technical roadmaps and lifecycle management for EKS, MSK, RDS, Tyk and Ghost, migrated to Graviton4 and right-sized clusters, achieving a 30% reduction in infrastructure spend.
- Strengthened cluster security by extending Checkov with server-side hooks, enforced 10+ custom policies, migrated legacy EC2 fleets to AL2023 and integrated automated vulnerability scanning, reducing deployment-time risks by 40% and ensuring 100% compliance.
- Deployed a self-hosted n8n instance to automate cross-functional workflows, streamlined mobile releases with Fastlane Match and automated Jenkins rollback protocols, cutting recovery time by 50%.
- Conducted deep-dive postmortems and Root Cause Analyses for production outages, drove an 80% reduction in recurrence, resolved persistent 4xx/5xx errors via New Relic and implemented proactive SLI/SLO monitoring.

Technical Writing & Blog

- **Migrating AWS MSK from ZooKeeper to KRaft: A Canary Approach (Link)**
  A production migration case study detailing a zero-downtime Amazon MSK transition from ZooKeeper to KRaft using blue-green architecture, phased canary rollouts, rollback strategies, observability validation, and reliability safeguards for mission-critical Kafka workloads.
- **Migrating Production Workloads from Graviton3 to Graviton4, (Link)**
  Authored a technical guide for zero-downtime migration, highlighting performance improvements, cost optimization and compatibility validation for high-scale EKS clusters.
- **Automating iOS Certificate Renewal (Link)**
  Engineered a fully automated CI/CD pipeline for mobile certificate management, removing manual bottlenecks and mitigating expired credential risks.