Lalith Charan Ampabathina

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Professional Summary:

DevOps Engineer with 2+ years of experience driving automation, streamlining deployments, and enhancing cloud-native application performance across AWS and Azure. **Designed and optimized CI/CD pipelines** using Jenkins, Argo CD, and GitOps workflows, enabling faster and more reliable releases. **Engineered containerized environments** with Kubernetes and Docker, and **implemented Infrastructure as Code (IaC)** with Terraform and Ansible to standardize scalable infrastructure. Integrated **DevSecOps practices** (SonarQube, Trivy, Vault) to strengthen security and compliance. Recognized for **improving delivery efficiency, reducing manual effort, and contributing to high-availability cloud solutions**.

TECHNICAL SKILLS:

- **CI/CD & Automation**: Jenkins, GitLab CI, Argo CD
- **Containerization & Orchestration**: Docker, Kubernetes, OpenShift
- **Cloud Platforms**: AWS, Azure
- **Infrastructure as Code (IaC)**: Terraform, Ansible
- **Source Control & Versioning**: Git, GitHub, GitLab
- **Monitoring & Observability**: Prometheus, Grafana, ELK Stack (Elasticsearch, Logstash, Kibana), EFK Stack (Fluentd, Fluent Bit)
- **Security & Compliance**: Trivy, SonarQube, OWASP Dependency-Check, HashiCorp Vault
- **Scripting & Programming**: Shell, Python, Groovy, YAML
- **Artifact Management**: Nexus 3, Docker Hub
- **Operating Systems**: Linux (RHEL, Ubuntu), Windows

Professional Experience:

Tata Consultancy Services (TCS) – *DevOps Engineer*

📍 *June 2023 – Present* | India

Environment: Git, GitLab, Jenkins, Argo CD, Docker, Kubernetes, Trivy, Prometheus, Grafana, Apache Tomcat
Responsibilities:

- Built and maintained CI/CD pipelines using Jenkins, Argo CD, Nexus, SonarQube, and Git, reducing release cycle time by **65%** and deployment errors by **80%**.
- Designed multi-stage Docker builds and implemented secure image lifecycle policies in Docker Hub, shrinking image size by **70%** and improving build time by **40%**.
- Managed Kubernetes clusters for **60+** microservices, configuring deployments, services, ingress, PV/PVC, and HPA, achieving **99.9%** uptime.
- Implemented GitOps with Argo CD and declarative manifests, doubling deployment traceability and environment consistency.
- Integrated Trivy and OWASP Dependency-Check scans into pipelines, blocking **200+** critical vulnerabilities pre-production.
- Created Prometheus/Grafana dashboards for JVM heap, error rates, and latency; reduced MTTD by **60%** and MTTR by **45%**.
- Automated SSL certificate renewal for NGINX ingress, eliminating downtime from expired certs.
- Integrated GitLab with Jenkins, automating deployments and reducing manual effort by *50%*.
- Centralized logging for **250+** pods with EFK and Fluentd-to-Elasticsearch, reducing debugging from hours to minutes.
- Mentored **5+** engineers on DevOps workflows, reducing onboarding time by **50%**.

PROJECTS:

1. Automated CI/CD Pipeline for Microservices
Tech Stack: Jenkins, Git, Docker, Kubernetes, Argo CD, Harbor, SonarQube

- Developed a single-branch, multi-environment Jenkins pipeline (dev/stage/prod), reducing pipeline maintenance effort by *50%*.
- Enforced automated code quality gates using SonarQube and vulnerability scans, lowering post-deployment defects by *35%*.
- Implemented Harbor retention policies that reclaimed *30%* of registry space and improved storage efficiency.
- Achieved 80% reduction in manual errors by fully automating CI/CD workflows.
- Integrated Argo CD GitOps workflows for declarative deployments, ensuring *100% consistency* across environments.
- Implemented role-based access control (RBAC) in Jenkins and Kubernetes, strengthening pipeline and cluster security.
- Documented CI/CD standards and best practices, enabling faster onboarding of new team members.

2. Centralized Logging & Monitoring Stack
Tech Stack: Prometheus, Grafana, Loki, Alertmanager

- Automated Kubernetes service discovery in Prometheus to monitor *250+ pods and nodes* across environments.
- Built Grafana dashboards for JVM performance, API latency, and error trends, improving proactive issue detection by *40%*.
- Configured Loki-based alerts to detect recurring error patterns in real time, preventing repeated production incidents.
- Reduced troubleshooting time by 67% (*2 hours → 40 minutes*) through centralized monitoring and alerting.
- Created Alertmanager rules with severity-based escalation, reducing false positives and improving incident response.
- Optimized Prometheus retention policies, cutting storage usage by *25%* while maintaining historical visibility.
- Collaborated with application teams to define SLIs/SLOs, aligning monitoring metrics with business objectives.

EDUCATION:

- **Bachelor of Technology (B.Tech) in Electronics & Communication Engineering (ECE)**
  Sri Venkateswara College of Engineering, JNTUA, [Tirupati, Andhra Pradesh] - *Graduated: 2022*

- **Diploma in Electronics & Communication Engineering (ECE)**
  Government Polytechnic, [Proddatur, Andhra Pradesh] - *Completed: 2019*

ACHIEVEMENTS:

- Reduced deployment time by 87% (*2 hrs → 15 mins*) through CI/CD pipeline automation.
- Migrated 40+ applications from manual deployments to Kubernetes/GitOps, improving release reliability by *40%*.
- Increased deployment frequency 5× (*weekly → daily*) by optimizing workflows and pipelines.
- Lowered post-deployment defects by 35% by enforcing SonarQube quality gates and integrating vulnerability scans.
- Cut troubleshooting time by 67% by building centralized monitoring with Prometheus, Grafana, and Loki.
- Reclaimed 30% of container registry storage by implementing Harbor retention and cleanup policies.
- Strengthened CI/CD security with role-based access control (RBAC) in Jenkins and Kubernetes, ensuring compliance in enterprise environments.