

PrasannaKumar Singanamalla

Portfolio: <https://www.nextgendev.site/>
GitHub: <https://github.com/spkumar17/>
LinkedIn: <https://www.linkedin.com/in/prasanna-kumar-singanamalla/>

Email: PrasannaKumarsinganamalla@gmail.com
Phone No: +917330795769
Hyderabad | IN

PROFESSIONAL SUMMARY

Result-driven DevOps Engineer with 2.5 years of experience in automating infrastructure, managing production deployments, and optimizing CI/CD pipelines. Skilled in Jenkins, Docker, and Kubernetes on AWS, with a strong focus on security, scalability, and operational efficiency. Passionate about driving innovation through automation and modern DevOps practices.

SKILLS SUMMARY

- **Languages & Operating Systems:** Python, FastAPI, SQL, Linux, Shell.
- **Continuous Integration/Delivery:** Jenkins, GitLab CI, Argo-CD
- **Cloud & Containerization:** AWS, Azure (Basics), Docker, Kubernetes
- **Artifacts, & Security:** Nexus, SonarQube, Trivy, OWASP
- **Infrastructure as Code:** Terraform, Packer

WORK EXPERIENCE

INFOSYS | Senior System Associate

January 2023- Present

Project: Deployment & Management of PPM Application

- Automated AWS infrastructure provisioning using Terraform, reducing deployment time by 40% while enforcing Infrastructure as Code (IaC) standards across EC2, S3, and EKS resources.
- Reduced AWS operational costs by implementing auto-scaling strategies, S3 lifecycle policies, and Spot Instances utilization across EC2 and Kubernetes environments.
- Optimized CI/CD pipelines with Jenkins, integrating Docker, Maven, SonarQube, and Trivy to improve deployment speed by 30% while ensuring code quality and security compliance.
- Implemented Git Ops workflows using Argo CD, achieving a 50% reduction in deployment time by automating Kubernetes cluster management and enabling seamless Git-to-cluster synchronization.
- Enhanced developer productivity by 25% by configuring automated Jenkins triggers on code commits, eliminating manual build processes and reducing deployment bottlenecks.
- Strengthened Kubernetes security by implementing RBAC controls and managing Config Maps/Secrets, enabling secure multi-tenant deployments while maintaining compliance standards.

PROJECTS

EKS Cluster Automation and Observability Framework | [LINK](#)

- Automated Amazon EKS provisioning using Terraform with S3 and DynamoDB for remote state management.
- Implemented Git Ops-based continuous deployment using Argo CD, improving release velocity and maintaining declarative configuration control.
- Deployed a full observability stack with Prometheus and Grafana, enabling real-time monitoring, email alerting, and application-level metric collection.
- Secured multi-team access with fine-grained RBAC policies and pod identity integration for EBS CSI driver, ensuring isolated and leastprivilege access.

Secure Cloud Infrastructure Automation | [LINK](#)

- Designed and implemented a secure three-tier VPC architecture with Public, Private, and Secure subnets, ensuring isolation of sensitive resources and controlled network access across application layers.
- Automated infrastructure provisioning using Terraform modules, enabling reproducible, scalable deployments with environment-specific variables and remote state management via S3 and DynamoDB.
- Created golden AMIs using Packer with Jenkins triggers, reducing provisioning time and ensuring consistent, pre-secured application environments across Auto Scaling Groups.
- Configured a highly available setup with multi-AZ Load Balancer, fault-tolerant ASG, and secure RDS deployment, enhancing reliability and performance of the deployed Java application.

CERTIFICATES

- [AWS Certified Cloud Practitioner](#)
- [GitHub Foundations Certification](#)
- [HashiCorp Certified Terraform Associate](#)
- [AWS Certified Solutions Architect-Associate](#)

EDUCATIONAL QUALIFICATION

Bachelors in Computer Application
Acharya Nagarjuna university

August 2019 – July 2022