

# Jayaprakash Reddy

+91 7829648638 - jayaprakash.jp63@gmail.com - WWW: <https://jayaprakashreddy.com>

## Summary

Lead infrastructure Consultant with 11 years of experience in architecting production cloud platforms across AWS, GCP, and Azure. Specialized in AI/ML infrastructure, Kubernetes orchestration, and leading platform engineering initiatives. Known for building high-performing teams, establishing technical standards, and delivering scalable solutions for complex business problems. Currently leading the GPU marketplace infrastructure at NVIDIA.

## Skills

**Cloud Platforms:** AWS, GCP, Azure

**AI/ML Infrastructure:** GPU orchestration, NVIDIA GPU Operator, , ML workload management, Inference, Multi-tenant GPU isolation, Resource scheduling

**Kubernetes & Container Orchestration:** GKE, EKS, AKS, Multi-cluster management (Rafay), Service Mesh (Istio, Traefik, Consul), Kubernetes Operators, Gateway API, Helm, Docker, Container Registry

**Workflow & Data Orchestration:** Temporal, Apache Spark, Kafka, Zookeeper, RabbitMQ

**Infrastructure as Code:** Terraform, Terragrunt, Packer, CloudFormation, Ansible, Chef, Puppet

**CI/CD & Build Tools:** GitHub Actions, Jenkins (Shared Libraries, Pipeline as Code, Groovy), GoCD, GitLab CI/CD, Maven, Gradle, Nexus, SonarQube

**Observability & Monitoring:** OpenTelemetry, Signoz, Prometheus, Dynatrace, New Relic, ELK Stack , Splunk, CloudWatch, StackDriver

**Security & Identity:** Keycloak, HashiCorp Vault,

Workload Identity Federation, AWS IAM, GCP IAM, RBAC, Certificate Management, Cloud Armor, Network Security

**Networking & Load Balancing:** HAProxy, Nginx, Traefik, AWS ELB/ALB, GCP Load Balancer, VPC, Subnets, Cloud DNS, Route53, API Gateway

**Data Stores:** PostgreSQL, Cloud SQL, RDS

(PostgreSQL, MySQL, Oracle), MongoDB, Redis, Elasticsearch, Minio, S3, Cloud Storage

**Languages & Scripting:** Python, Golang, Shell (Bash), Node.js, Groovy

**Frameworks & Development:** FastAPI, Next.js, React.js

**Analytics & BI Tools:** Tableau, Superset

**IoT & Edge Computing:** Raspberry Pi, ESP8266, Arduino, AWS IoT, Alexa Skills Development

## Experience

ThoughtWorks

December 2019 to Current

### Lead Infrastructure Consultant

**Client: NVIDIA | Lead Infrastructure Consultant | Feb 2025 - Present**

- Leading infrastructure architecture and implementation for GPU marketplace SaaS platform connecting GPU providers with consumers for ML/AI workloads
- Mentoring cross-functional team of 5 engineers on cloud-native best practices, establishing coding standards, code review processes, and infrastructure design patterns
- Designed multi-tenant Kubernetes architecture on GKE enabling secure workload isolation while optimizing GPU resource utilization across diverse customer workloads
- Drove adoption of GitOps practices using Terragrunt across the organization, creating reusable patterns that reduced infrastructure provisioning time significantly and improved consistency
- Architected observability strategy using OpenTelemetry and Signoz stack, establishing monitoring standards that became the template for other platform teams

- Led technical evaluation and implementation of Rafay Systems for multi-cluster management, presenting findings to leadership and driving adoption decision
- Championed security-first approach implementing Keycloak with Workload Identity Federation, conducting security reviews and establishing zero-trust architecture principles
- Collaborated with product and engineering teams to translate business requirements into scalable technical solutions, balancing performance, cost, and time-to-market
- Built FastAPI microservices and Next.js frontend components, bridging infrastructure and application development to deliver end-to-end features
- Established incident response procedures and on-call practices, leading post-mortems and driving process improvements

**Technologies:** GCP, Kubernetes, Terraform, Terragrunt, Temporal, Keycloak, OpenTelemetry, Rafay, Python, FastAPI, Next.js

**Client: Global Payments | Platform Engineering Lead | May 2023 - Feb 2025**

- Led initiative to build self-service database provisioning platform, working closely with development teams to understand pain points and design solutions
- Established infrastructure-as-code practices for database automation using Terraform, creating patterns adopted across multiple teams
- Collaborated with security and compliance teams to ensure database configurations met PCI-DSS requirements while maintaining developer productivity
- Automated database lifecycle management reducing manual operations and enabling teams to move faster independently
- Designed monitoring and alerting strategy using CloudWatch, training teams on operational best practices
- Implemented cost optimization strategies through right-sizing and automated resource management

**Technologies:** AWS (EC2, Service Catalog, CloudWatch), MongoDB, Redis, Terraform, Python, Jenkins

**Client: McKinsey | Senior Infrastructure Consultant | Dec 2019 - Apr 2023**

- Established technical vision and roadmap for platform evolution, presenting to stakeholders and aligning engineering efforts with business objectives
- Mentored junior engineers on cloud architecture, infrastructure-as-code, and Kubernetes, conducting regular knowledge-sharing sessions and code reviews
- Designed cloud-agnostic infrastructure spanning AWS and Azure with disaster recovery strategy, making critical architectural decisions balancing cost and reliability
- Championed infrastructure-as-code culture, creating reusable Terraform modules that became standard across multiple client projects
- Led migration from monolithic deployments to microservices architecture, coordinating with application teams and managing technical dependencies
- Architected service mesh implementation using Traefik and Consul, establishing patterns for service discovery and traffic management
- Built Elasticsearch and Spark clusters for real-time pricing analytics, working closely with data engineering teams to optimize performance
- Established comprehensive observability practices using Dynatrace, creating dashboards and alerting strategies that reduced incident response time
- Implemented blue-green deployment strategy enabling frequent releases with minimal risk
- Drove cost optimization initiatives through automation and efficient resource utilization
- Created and maintained technical documentation, runbooks, and disaster recovery procedures
- Led quarterly disaster recovery drills, training team members on incident response and establishing processes that improved operational maturity

**Technologies:** AWS, Azure, Kubernetes (CKA/CKAD), Terraform, Elasticsearch, Spark, Kafka, Consul, Traefik, Vault, PostgreSQL, Golang, Python, GoCD, GitLab, Dynatrace

Tricon InfoTech

October 2017 to December 2019

**Senior DevOps Engineer**

bengaluru, India

- Led infrastructure design and implementation for microservices platforms across multiple enterprise clients (Pearson, Kohl's)
- Established CI/CD best practices using Jenkins, creating shared libraries and pipeline templates adopted by development teams
- Designed and implemented highly available HashiCorp Vault and Consul clusters for secrets management and service discovery
- Built AWS and GCP infrastructure using Terraform with immutable infrastructure patterns
- Created custom Lambda functions for API Gateway authorization and infrastructure automation
- Led Kubernetes cluster setup for on-premise to cloud migration initiatives
- Implemented comprehensive monitoring using New Relic and ELK stack
- Mentored team members on infrastructure automation and cloud best practices

**Technologies:** AWS, GCP, Terraform, Packer, Jenkins, Kubernetes, Vault, Consul, HAProxy, Kafka, Python, Node.js

Tata Consultancy Services

July 2014 to October 2017

**DevOps Engineer**

bengaluru, India

- Participated in large-scale application migration to AWS, working across assessment, planning, and implementation phases
- Built CI/CD pipelines using Jenkins with integration to build tools and static analysis
- Provisioned AWS infrastructure using Terraform, creating reusable modules for common patterns
- Implemented configuration management using Puppet and Ansible
- Performed database migration from Oracle on-premise to AWS RDS
- Created custom AMIs using Packer for standardized server provisioning

**Technologies:** AWS, Terraform, Packer, Jenkins, Puppet, Ansible, Ruby (ServerSpec)

## Education and Training

**Sastra University**

March 2014

**Bachelor of Technology in Electronics & Communications Engineering**

Thanjaur, India

## Certifications & Licenses

NVIDIA Infrastructure & Operations