

Charan Surya Nikhil Kilana

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[LinkedIn](#) [GitHub](#)

CERTIFICATIONS

[HashiCorp Certified Terraform Associate](#), [AWS Certified Solution Architect](#), [AWS Certified Cloud Practitioner](#)

PROFESSIONAL EXPERIENCE

TechZert Software Private Limited

May 2021 – June 2023

DevOps Engineer

- Migrated microservice architecture application from **Docker Swarm** to **Amazon EKS (Kubernetes)** of **100 microservices**.
- Designed **Terraform** scripts to automate infrastructure provisioning, with the state file stored in **Amazon S3** and state locking enabled via **Amazon DynamoDB**, ensuring consistency and preventing concurrent modifications during deployment.
- Authored **Ansible playbooks** and **Bash scripts** for automated server maintenance, log rotation, and data backup tasks in Linux environments.
- **Automated** the containerization process in **Jenkins** included **unit testing**, **SonarQube analysis**, **dependency checks** and **Trivy**, building **Docker** images and pushing them to **Amazon ECR** for deployment.
- Implemented **AWS cost optimization** by developing an **AWS Lambda** function in **Python** to automatically identify and delete unattached snapshots or stale **EBS snapshots**, automated the process using **CloudWatch Events**.
- Handled **Kafka** and **RabbitMQ** issues like message backlogs, consumer timeouts, and node failures, used **Prometheus** and broker logs to troubleshoot and restore message flow in microservices.
- Reduced **Docker** image sizes by up to **70%** in production by optimizing **Dockerfile** efficiency on **Linux** based systems.
- Implemented **IAM** using **CloudTrail** auditing and managing least-privilege access across AWS accounts.
- Monitored **AWS Config** to detect configuration drifts and ensure compliance with security baselines across AWS resources responded to alerts sent via **SNS** for non-compliant changes.
- Integrated **CAST AI** with **Kubernetes** clusters to **automated cost optimization**, resulting in up to **45%** reduction in cloud costs.

Realkey Software

April 2020 – June 2020

Software Engineer Intern

- Designed and developed **REST APIs** using **Python**, **Django**, and **MySQL**, facilitating seamless data exchange for API calls.

ACADEMIC PROJECT

End to End Deployment for a Multi-Language Microservice project ([link](#))

May 2025

- Integrated **GitHub** with **Jenkins** to automate eight multi-language microservices, wrote custom **Dockerfile** to containerize each service and pushed images to **Docker Hub**, reducing deployment time by **60%**.
- Deployed workloads to **Amazon EKS** using **Helm** charts and **ArgoCD** for **GitOps** based delivery of **stateful**, **stateless**, and **queue-based** services, configured **NGINX Ingress** with **Application load Balancer** for secure external access.
- Implemented observability stack using **Prometheus-Grafana** for monitoring, **Fluent Bit**, **Elasticsearch**, **Kibana** for centralized log aggregation, and **Open Telemetry** with **Jaeger** for tracing reducing issue detection, troubleshooting, and debugging.

Monolithic Project ([link](#))

Jan 2025

- Automated **AWS infrastructure provisioning** using **Terraform** and integrated it with **Jenkins**, enabling seamless and consistent deployments, which reduced infrastructure setup time by 40%.
- Configured **Splunk** to collect centralized logs from **Jenkins** pipelines, reducing troubleshooting time by 40%, and integrated **Slack** notifications for real-time pipeline status updates, improving response time by 30%.

EDUCATION

The University of Texas at Dallas

May 2025

M.S. Information Technology and Management

GPA 3.71

GITAM University

April 2021

Bachelor of Engineering in Civil Engineering

GPA 3.5

ADDITIONAL INFORMATION

Skills: AWS, Azure, Python, MySQL, PostgreSQL, Bash, Linux, Git, GitHub, BitBucket, Maven, Jenkins, SonarQube, Nexus, Docker, Kubernetes, Ansible, Terraform, Prometheus, Grafana, Elastic Search, Fluent bit, Splunk, ArgoCD, CastAI, Kafka, Jira