Swaroopa Katireddy

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PROFESSIONAL SUMMARY

DevSecOps Engineer with 8+ years of experience in Infrastructure Automation, DevOps, and Cloud Platform Management. Proficient in Infrastructure-as-Code (IaC) using Terraform, building CI/CD pipelines with Jenkins and Spinnaker, containerization with Docker, and deploying applications on Kubernetes. Skilled at improving deployment workflows, automating cloud operations, and enhancing system reliability for highly available solutions.

- Expertise in Infrastructure-as-Code (IaC) using Terraform.
- Hands-on experience with configuration management and automation using Ansible for provisioning, patching, and application deployments.
- Skilled in designing and managing CI/CD pipelines with Jenkins, Spinnaker, Azure DevOps, TeamCity, Octopus Deploy, and Argo CD, integrated with SonarQube for code quality analysis and JFrog Artifactory for artifact management.
- Proficient in containerization and orchestration using Docker, Docker Compose, ECS, Kubernetes, and Istio for service mesh and traffic management.
- Strong background in automating cloud operations, monitoring, and incident response.
- Hands-on experience with observability and monitoring tools such as ELK Stack, Prometheus, Grafana, Trivy, and New Relic.
- Proficient in Python scripting and PowerShell for automation, configuration management, and building custom tools.
- Experienced in deploying secure, scalable, and highly available cloud solutions aligned with business goals.
- Knowledge of Cloud Security and SecOps practices including vulnerability management, access controls, secret management (Vault/SSM, CyberArk, Azure AD), and compliance monitoring.
- Implemented DevSecOps pipelines integrating security scanning (SAST, DAST, container image scanning, and dependency checks) into CI/CD workflows.
- Emerging expertise in Generative AI and MLOps integration, including AWS Bedrock, leveraging LLMs for automation, intelligent workflows, and building cloud-native AI-driven solutions.
- Hands-on experience designing and deploying MCP (Model Context Protocol) servers for AI systems integration and multi-agent orchestration.
- Experienced in Software Development Lifecycle (SDLC) methodologies, including Waterfall and Agile, for delivering end-to-end cloud and automation projects.
- Hands-on experience in version control using Git and Bitbucket, including branching, pull request (PR) reviews, and collaborative code management.
- Strong experience working in Linux-based environments, including shell scripting, system administration, performance tuning, and troubleshooting for production-grade infrastructure.
- Solid understanding of networking concepts including VPCs, subnets, routing, DNS, load balancing, NAT, VPNs, firewalls, and network security groups, with hands-on experience configuring AWS networking services such as Route 53, CloudFront, and VPC peering.
- Hands-on experience with AWS services including AWS File Transfer Family, DataSync, Storage Gateway, Airflow, S3, Lambda, SNS, SQS, IAM, and CloudWatch, along with workflow orchestration platforms such as Apache Airflow and AWS MWAA.
- Skilled in SFTP user creation and access provisioning (including AWS Transfer Family) for secure, auditable file exchange with internal and external partners.
- Hands-on experience configuring and maintaining AWS DataSync for automated, scheduled data transfer between on-premises systems and cloud storage.
- Experienced in Apache Airflow administration, including DAG monitoring, incident triage, and root-cause resolution to ensure reliable data pipeline orchestration.

TECHNICAL SKILLS

- Cloud Platforms: AWS, Azure, GCP
- Identity and Access Management: Azure Active Directory (Azure AD)
- Infrastructure as Code (IaC): Terraform
- CI/CD Tools: Jenkins, Spinnaker, Rio, Azure DevOps, TeamCity, Octopus Deploy, Argo CD
- Containerization, Orchestration and Service Mesh: Docker, Kubernetes, Istio
- Configuration Management: Ansible

- Observability and Monitoring: Prometheus, Grafana, ELK Stack (Elasticsearch, Logstash, Kibana), AWS CloudWatch, Datadog, New Relic, Fluentd, OpenTelemetry, Trivy
- Generative AI and MCP: MCP server development, AWS Bedrock integration, Retrieval-Augmented Generation (RAG) implementations

PROFESSIONAL EXPERIENCE

Integration Engineer, Eli Lilly **Jan 2026 – Present**

- Handled Apache Airflow production incidents, triaged failed and stuck DAGs and tasks, performed root-cause analysis, and restored pipeline SLAs for critical data workflows.
- Performed database upgrades across environments, planning maintenance windows, validating backups and rollback plans, and minimizing downtime during version migrations.
- Managed SFTP user creation and access provisioning (including AWS Transfer Family) for secure, auditable file exchange with internal and external partners.
- Configured and maintained AWS DataSync tasks for automated, scheduled data transfer between on-premises systems and cloud storage.
- Set up and administered AWS Storage Gateway for hybrid cloud storage integration, enabling seamless on-prem to AWS storage connectivity.

Technical Lead, Trianz, Hyderabad **Jan 2023 – Jan 2026**

- Deployed and managed AWS resources (RDS, EC2, EKS, IAM) using Terraform with code managed in Azure DevOps.
- Configured and managed Transit Gateways for secure networking across AWS accounts.
- Built automation workflows to manage cloud resources, including automated EBS volume deletion using AWS Step Functions and Lambda.
- Designed and deployed ECS services for containerized applications, integrating them with load balancers for optimized traffic distribution and Route 53 for DNS management, improving availability and performance.
- Managed cloud infrastructure using scheduled tags to automate the start and stop of non-essential services, optimizing resource utilization and reducing costs during off-peak hours.
- Implemented robust security measures using Trend Micro, AlertLogic, GuardDuty, AWS Inspector, FortiWeb, and FortiGate, achieving compliance with industry standards and safeguarding critical data.
- Hands-on experience in AWS FinOps practices, including cost optimization, billing management, budget forecasting, and implementing tagging strategies for effective cloud cost governance.

Senior Engineer, Falabella, Bengaluru **Jul 2022 – Jan 2023**

- Creation of GCP resources such as Pub/Sub and Redis instances using Terraform code.
- Establishment of monitoring systems such as ELK, Prometheus, and Grafana.
- Troubleshooting Helm issues while deploying GitLab CI/CD.
- Deploying the Camunda run tool in the GKE Kubernetes cluster.

Consultant, Capgemini, Bengaluru **Jun 2021 – Jul 2022**

- Vault Deployment: Deployed Vault on Kubernetes as a StatefulSet with Consul as backend for service discovery.
- Infrastructure as Code: Built EKS clusters and provisioned Vault and Consul using Terraform.
- Helm Upgrade: Migrated from Helm v2 to Helm v3 for improved security and chart management.
- Backup Strategy: Used Velero to back up Vault configs and storage for disaster recovery.
- Automation: Onboarded Vault and Consul with Terraform; Ansible playbooks structured with roles and executed via AWX Tower for automation.
- Containerization: Wrote Dockerfiles for infrastructure containers (e.g., RavenDB) and application containers, enhanced with Ansible Docker modules (labels, env, ports).
- GitHub Actions: Automated file uploads from S3 to AWX Tower using GitHub Actions.
- Access and Authentication: Configured IAM Auth for Vault, Kubernetes Auth for apps, and SSO integration via OpenID Connect.
- Secrets Management: Created Vault namespaces for team-level isolation and built a Vault Agent sidecar using a mutating webhook.
- ECS Integration: Implemented AWS ECS with dual containers (App and Vault Agent) sharing EBS volumes.
- Monitoring and Logging: Implemented audit log shipping from pods to S3 using CronJobs; monitored Vault clusters with New Relic, Prometheus, and Grafana.
- Scaling and Reliability: Configured HPA for pod autoscaling and ensured cluster observability.

- Upgrades and Maintenance: Performed Vault and Consul upgrades by tuning Helm values.yaml files.
- DevOps Practices: Automated SSH connections between controllers and hosts, built Linux mirrors, and pushed Docker images to JFrog for use in Kubernetes manifests.

System Engineer, TCS, Bengaluru **Dec 2016 – Jun 2021**

- Maintained version control with Git, raising PRs for code updates such as adding Dockerfile and Jenkinsfile to client repositories.
- Built and managed CI pipelines using Rio (backend Jenkins) for automated builds and testing.
- Created and published Docker images to JFrog Artifactory, later used as container images in Kubernetes deployments.
- Authored and managed Kubernetes manifests (Deployment, Service, Ingress, CronJobs) for application rollout.
- Configured Splunk logging with correct stanza (index and sourcetype) in deployment YAML files.
- Implemented secrets management using init containers and frequent golden image upgrades.
- Designed and managed Spinnaker CD pipelines with Docker registry as trigger point; used Kustomize for Spinnaker bake rendering.
- Performed deployment validation via port checks and Ingress endpoint testing for sanity verification.
- Extended Grafana dashboards with Prometheus datasource, Kube State Metrics, and Transformer pods for CPU and memory monitoring across namespaces.
- Integrated JMX exporter agent for monitoring Java Spring Boot applications.
- Automated infrastructure provisioning using Terraform (IaC). Built Jenkins CI/CD pipelines to execute code directly from Git repositories.
- Applied Ansible for configuration management, provisioning, and deployments.
- Authored Packer templates to build reusable custom AMIs for projects.
- Automated infrastructure tasks with AWS Lambda functions.
- Configured New Relic alerting for proactive monitoring.
- Delivered projects using Agile methodology, actively participating in sprint planning and reviews.
- Hands-on experience with AWS services (EC2, S3, EFS, IAM, VPC, Lambda, etc.) for scalable cloud solutions.
- Worked with Docker agents to run builds and workloads in containerized environments.

CERTIFICATIONS

- AWS Certified Solutions Architect – Associate
- Certified Kubernetes Administrator (CKA)
- Microsoft Certified: Azure Fundamentals (AZ-900)

EDUCATION

- Bachelor of Technology, G. Pullareddy Engineering College, Kurnool, Andhra Pradesh – 2016
- Post Graduate Diploma in Business Administration (Finance), SCDL, 2016 – 2018