

Name:- Nikitha

Senior DevOps Engineer

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Professional Summary

Senior DevOps Engineer with **12 years** of experience leading automation, reliability and security initiatives across large-scale systems and proven expertise in streamlining software delivery, enhancing system performance and embedding security within DevOps and SRE practices and adept at driving cross-functional collaboration, optimizing infrastructure and enabling resilient, high-availability environments that align with business and compliance goals.

- Senior DevOps Engineer with **12 years of experience** designing, building, and operating **secure, scalable, and resilient infrastructure** across **AWS, Azure, and GCP**.
- Architected **multi-cloud platforms** leveraging **AWS SageMaker, Azure ML Workspace / AI Foundry, and GCP Vertex AI**, supporting enterprise-scale, production-grade workloads.
- Led **Infrastructure as Code (IaC)** initiatives using **Terraform, CloudFormation, and Ansible**, enabling standardized, reproducible, and compliant deployments across hybrid and multi-cloud environments.
- Designed and optimized **enterprise CI/CD pipelines** using **Jenkins, GitLab CI, GitHub Actions, Harness, and ArgoCD**, accelerating delivery and improving release reliability.
- Implemented **zero-downtime deployment strategies** including **blue-green, canary, and rolling releases**, ensuring high availability and seamless production rollouts.
- Advanced **pipeline automation** using AI-assisted tools (**GitHub Copilot for DevOps, CodeAI, DeepCode**) to improve build efficiency, quality gates, and deployment frequency.
- Built and managed **containerized application platforms** using **Docker and Kubernetes (AKS, EKS, GKE)**, enabling scalable microservices and cloud-native architectures.
- Championed **GitOps-based container delivery** using **ArgoCD and Helm**, enabling declarative deployments, version control, and automated rollback strategies.
- Designed and secured **cloud networking architectures** across AWS, Azure, and GCP, including **VPC/VNet design, DNS, VPNs, load balancers, autoscaling, and multi-region failover**.
- Implemented **DevSecOps and security automation**, embedding **Snyk AI, Checkmarx AI, Aqua Security, Darktrace, secrets management, and policy-as-code** across CI/CD pipelines.
- Built **end-to-end observability platforms** using **Datadog, Dynatrace, Splunk, Moogsoft, BigPanda, Prometheus**, enabling proactive monitoring and faster issue resolution.
- Led **incident response and reliability operations**, integrating **PagerDuty AIOps, OpsGenie, and xMatters** to reduce MTTR and improve operational readiness.
- Applied **SRE principles** including **SLOs, error budgets, capacity planning, and performance optimization**, driving system reliability and operational excellence.
- Collaborated closely with **engineering, security, SRE, and data teams** to deliver scalable platforms, enable automation-first practices, and ensure secure-by-design delivery.
- Recognized **technical leader and mentor**, fostering DevOps culture, mentoring teams, driving continuous improvement, and bridging development, operations, and security.

Career Portfolio

**Citigroup Inc | New York, NY |
Senior DevOps Engineer**

Duration:- Nov 2024 – Till Date

Mission & Contributions:

- Designed and provisioned **scalable, fault-tolerant infrastructure across Azure and GCP** using **Terraform, ARM templates and Helm**, supporting secure multi-environment deployments.
- Optimized **compute, storage and managed database services** across cloud platforms, enabling highly available and performance-driven application architectures.
- Defined and enforced **governance, RBAC, tagging standards and compliance controls** to ensure secure, auditable and policy-driven multi-cloud operations.
- Automated infrastructure provisioning and configuration management using **Terraform, Ansible and Helm**, improving deployment consistency and reducing environment delivery time.
- Built reusable **IaC modules, templates and automation scripts**, simplifying environment setup and improving infrastructure reliability across cloud and hybrid environments.
- Implemented **GitOps-driven delivery models** using **ArgoCD and FluxCD**, enabling declarative, version-controlled and auditable infrastructure and application deployments.
- Designed and maintained **end-to-end CI/CD pipelines** using **Azure DevOps, Jenkins, GitHub Actions and Harness**, enabling automated builds, testing and deployments.
- Integrated **quality gates and security scans** using **SonarQube, Nexus, OWASP, CodeAI and DeepCode**, ensuring code quality, performance and compliance before releases.
- Streamlined release workflows with **approval gates, rollback strategies and versioned deployments**, significantly reducing deployment risk and manual intervention.
- Implemented **secrets management and secure configuration** using **Azure Key Vault and Google Secret Manager**, protecting credentials and sensitive data.
- Embedded **DevSecOps practices**, integrating **Snyk AI, Checkmarx AI, Aqua Security, Prisma Cloud and Trivy** for continuous vulnerability and runtime security.
- Built centralized **observability and monitoring platforms** using **Azure Monitor, Prometheus, Grafana, Datadog, Splunk, Dynatrace, Moogsoft and BigPanda**.
- Designed and managed **centralized logging and tracing** using **ELK Stack, Cloud Logging and Cloud Trace**, improving visibility and root-cause analysis.
- Architected and secured **cloud networking** including **VPCs, subnets, firewalls, load balancers, VPNs and peering**, enabling secure hybrid connectivity.
- Collaborated closely with **development, SRE, QA and security teams**, providing 24/7 production support via **PagerDuty AIOps, OpsGenie and xMatters**, while driving an automation-first DevOps culture.

**American Express | Palo Alto, CA |
DevOps Engineer/ DevOps Specialist**

Duration:- Aug 2022 – Oct 2024

Mission & Contributions:

- Led migration of mission-critical workloads from GCP to **AWS**, ensuring zero data loss and alignment with disaster recovery and business continuity plans.
- Automated infrastructure provisioning using **Terraform and CloudFormation**, delivering scalable and repeatable environments across staging, QA, and production.
- Managed core **AWS services** including EC2, Lambda, S3, RDS, IAM, ECS/Fargate, Elastic Beanstalk, and CloudFront for secure enterprise workloads.

- Implemented **high-availability architectures** using EC2 Auto Scaling, RDS Multi-AZ, S3, SNS, SQS, and EFS to ensure resilient performance under variable loads.
- Built **CI/CD pipelines** with CodePipeline, CodeBuild, CodeDeploy, GitHub Actions, and artifact repositories, integrating testing and security checks.
- Secured infrastructure using **AWS Secrets Manager, KMS, IAM, RBAC, and Okta SSO**, embedding compliance and automated policy enforcement in pipelines.
- Engineered **networking and zero-trust security** using VPCs, subnets, route tables, NACLs, and security groups for isolated and secure workloads.
- Deployed and managed **containerized applications** using EKS, ECR, Helm, and AWS App Mesh, optimizing scaling, deployments, and traffic management.
- Enabled **observability and monitoring** with CloudWatch, X-Ray, CloudTrail, and centralized ELK/EFK logging to improve diagnostics and incident response.
- Automated operational workflows with **AWS CLI, SDK, Boto3, and Ansible**, increasing deployment speed, consistency, and disaster recovery readiness.

**Cardinal Health | Dublin, OH |
SRE (Site Reliability Engineering)**

Duration:- May 2019 – Jul 2022

Mission & Contributions:

- Supported large-scale production workloads on **Microsoft Azure**, focusing on system reliability, availability, performance optimization, and cost efficiency for business-critical services.
- Automated infrastructure provisioning and environment consistency using **Terraform, ARM/Bicep, and Ansible**, reducing configuration drift and manual operational effort.
- Operated and stabilized **AKS (Azure Kubernetes Service)** clusters, implementing autoscaling, health probes, rolling upgrades, and load balancing to meet availability and reliability targets.
- Designed and maintained **resilient cloud networking** using Azure VNet, DNS, NAT Gateway, and Virtual WAN to ensure secure, low-latency, and fault-tolerant connectivity.
- Built and maintained **CI/CD reliability workflows** using Azure DevOps, Jenkins, and GitLab CI, supporting safe releases, rollback readiness, and reduced deployment risk.
- Implemented **blue-green and canary deployments** with AKS, Helm, Azure Application Gateway, and Front Door to achieve near-zero downtime during production releases.
- Strengthened **observability and monitoring** using Azure Monitor, Application Insights, and Log Analytics, enabling proactive alerting, distributed tracing, and faster root-cause analysis.
- Applied **SRE practices** including capacity planning, autoscaling, error reduction, and cost optimization using Azure Autoscale, Azure Advisor, and Cost Management.
- Improved **security and reliability posture** by managing secrets with Azure Key Vault, enforcing RBAC with Azure AD, and applying Azure Policy for governance and guardrails.
- Supported **incident response and disaster recovery** using Azure Backup and Azure Site Recovery (ASR), reducing MTTR and ensuring business continuity during outages.

**City National Bank of Florida (CNBFL) | Miami, FL |
Devops Engineer**

Duration:- Oct 2017 – Apr 2019

Mission & Contributions:

- Built and managed **containerized environments** using Kubernetes and OpenShift CI/CD, enabling controlled rollouts, rollbacks, and secure build pipelines with AWS ECR image scanning.
- Designed and supported **scalable AWS infrastructure** using Lambda, ECS, IAM, CloudTrail, and Redshift to power secure, event-driven and analytics-heavy workloads.

- Implemented **Infrastructure as Code** with Terraform, ensuring reproducible, automated provisioning with reliable state management and dependency validation.
- Developed **CI/CD pipelines** using AWS CodePipeline, Bitbucket, and SonarQube, enforcing quality gates and centralized logging with Fluentd.
- Established **observability and monitoring** using Datadog, Prometheus, and Grafana, delivering real-time metrics, alerts, and log correlation for faster incident response.
- Automated system and application configuration using **Chef**, while strengthening container runtime security and compliance with **Aqua Security**.
- Optimized **networking and platform security** by improving AWS VPC design, DNS routing, VPN connectivity, firewalls, and enabling secure service discovery via **Consul Service Mesh**.
- Improved reliability and delivery confidence through **automation and testing**, leveraging Redis caching, RabbitMQ messaging, Veeam backups, Selenium Grid, JMeter, and Apache Airflow.

Southside Bancshares Inc | Tyler, TX |
Linux Administrator

Duration:- Nov 2013 – Sep 2017

Mission & Contributions:

- Managed and optimized **Linux environments** across development, staging, and production, improving stability, availability, and performance for mission-critical workloads.
- Automated administrative operations using **Bash and Python**, including patching, housekeeping, and user management, reducing manual effort and operational errors.
- Performed advanced **system monitoring and troubleshooting** using top, htop, netstat, vmstat, and iostat to identify bottlenecks and optimize resource utilization.
- Implemented **secure access controls** with SSH hardening, sudo policies, and role-based permissions, enforcing least-privilege security practices.
- Configured and maintained **networking services** such as DNS, NTP, DHCP, FTP, and firewall rules using iptables/firewalld for secure and reliable connectivity.
- Standardized **package and dependency management** across Linux distributions using apt, yum, and dnf to minimize version drift and improve system reliability.
- Automated **configuration management and provisioning** with Ansible, accelerating deployments, reducing configuration drift, and supporting immutable infrastructure strategies.
- Enhanced **observability and incident response** using Nagios, Prometheus, Grafana, system logs, journalctl, and systemd tools, reducing MTTR and improving uptime.

Learning & Credentials

- Bachelors in Electronics and Communication Engineering.

Certified Achievements

- Microsoft Certified Azure DevOps Engineer Expert.
- AWS Certified DevOps Engineer Professional.
- Google Professional Cloud DevOps Engineer certification.