

Nitishsai Bachu

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PROFESSIONAL SUMMARY

Site Reliability & DevOps Engineer with 4+ years building and maintaining scalable, secure infrastructure across on-premises and cloud environments (AWS, Azure, GCP). Expert in infrastructure-as-code (Terraform, Ansible), containerization (Kubernetes, Docker, AKS), CI/CD automation (Jenkins, GitHub Actions, GitLab), and Linux administration. Proficient in Python, Bash, Perl, and Ruby scripting for operational automation. Proven track record reducing deployment errors, cutting infrastructure costs, and delivering high-availability systems with OpenTelemetry observability.

EDUCATION

University of Houston

M.S., Computer Science

May 2025

Osmania University

B.E., Computer Science & Engineering

May 2025

SKILLS

Technical Skills: Languages: Python, Go, Bash, Perl, Ruby, SQL, Java, Shell scripting, PowerShell, Cloud & Infrastructure: AWS (EKS, ECS, EC2, RDS, S3, Lambda), Azure (AKS, Azure Container Apps, VMs), GCP, Terraform, Ansible, Infrastructure-as-Code (IaC), Containers & Orchestration: Kubernetes, Docker, Helm, OpenShift, VMware, Linux (Ubuntu, RHEL), KVM, CI/CD & Automation: Jenkins, GitHub Actions, GitLab CI, Git, automated deployment pipelines, quality gates, Observability & Reliability: OpenTelemetry, Prometheus, Grafana, Tempo, Datadog APM, Splunk, ELK, SLIs/SLOs, error budgets, incident response, Systems & Networking: Linux administration, DNS, VPN, firewall coordination, SSL certificates, TCP/IP, LDAP, SAML, Active Directory, Cisco firewalls, LAN/WAN, switches, routers, wireless access points, Endpoint & Support: desktops, laptops, Android/iOS devices, workstation installation and maintenance, patch management, IT support, Database & APIs: PostgreSQL, MySQL, MongoDB, REST APIs, JSON, YAML, Backup & Disaster Recovery: Backup automation, offsite replication, recovery procedures, RCA (Root Cause Analysis)

WORK EXPERIENCE

Site Reliability Engineer

Jan 2026 - Present

Motus

- Own client-impacting incidents across the Java/Spring Boot microservices, legacy PHP, and PostgreSQL behind driver mileage capture and vehicle reimbursement, resolving issues ~30% faster by following Datadog APM distributed traces, logs, and SQL to root cause.
- Cut manual remediation effort ~60% by automating repeatable fixes for trip, mileage, and reimbursement data in Python and PostgreSQL, and shipped automated mitigations that cut handling time for known defects ~70% ahead of permanent releases.
- Reduced investigation overhead ~40% by integrating Claude Code with Datadog, GitLab, Freshservice, and Atlassian via MCP, and built an MCP-based architecture tool that surfaces live microservice dependencies during incidents.
- Lowered repeat escalations into SRE ~35% by building self-service Python diagnostics for recurring driver and vehicle-program issues and standardizing handoffs across Support, SRE, and Application Engineering.
- Filed engineering-ready Jira defects (repro steps, Datadog evidence, SQL findings, code paths), cutting duplicate dev investigation ~30%.

Site Reliability Engineer

May 2024 - Dec 2025

Advanced Micro Devices (AMD)

- Engineered a Python and Go discovery platform for 2,000+ on-premises servers, switches, and routers, using concurrent goroutine/channel workers to scan network ranges and classify devices over Redfish, IPMI, SSH, and Telnet at ~99% accuracy; cut manual hardware validation effort ~75% and saved 150+ engineering hours per quarter.
- Reconciled live hardware state against internal inventory services through REST APIs, automatically flagging mismatches and newly discovered assets; reduced inventory discrepancies ~85% and reached ~95% asset-tracking accuracy.
- Troubleshoot device reachability and service traffic across routing, switching, VLANs, firewall rules, and load balancers, and collected interface, transceiver, and link-speed data from Cisco Nexus, HPE, and SONiC switches.
- Reduced mean time to detect ~60% and incident resolution time ~40% by instrumenting Python and Go services with OpenTelemetry, defining SLIs and SLOs with error budget tracking, and building Prometheus, Grafana, and Tempo views for metrics and traces.
- Containerized SRE tooling with Docker and deployed it to AWS EKS using Helm and Terraform-managed infrastructure, supporting zero-downtime blue/green rollouts and resolving pod scheduling, networking, and resource allocation failures.
- Standardized Jenkins and GitHub Actions pipelines with quality gates and automated Slack/Jira alerts for failed builds, deployments, and infrastructure discrepancies, reducing deployment errors ~40%.
- Contributed to \$800K+ in optimized or avoided capital expenditure through hardware allocation and utilization analysis; earned AMD's highest performance rating for automation impact and reliability delivery.

IT Systems Administrator

Aug 2023 - May 2024

University of Houston

- Provided Level 1/2 support for desktops, laptops, and mobile endpoints across 30+ Linux and Windows servers, resolving workstation and software installation, upgrade, and maintenance issues for critical departmental applications.
- Automated recurring maintenance with Ansible and PowerShell scripting, cutting manual effort and standardizing patch management across environments.
- Resolved 150+ infrastructure, networking, and access tickets, reducing average resolution time ~30% through earlier failure-domain isolation and documented, repeatable troubleshooting procedures.
- Documented troubleshooting procedures and knowledge materials for end-users, enabling self-service resolution of common issues.

DevOps Engineer

Jan 2022 - Jun 2023

Suntek Corp Solutions Pvt. Ltd.

- Containerized core workloads with Docker and deployed to AWS ECS and Kubernetes clusters, improving scalability ~60% and cutting high-traffic downtime ~40%.
- Built and maintained infrastructure-as-code using Terraform for AWS provisioning (EC2, RDS, S3, networking), eliminating manual drift and enabling reproducible, reviewable environment changes.
- Designed and automated CI/CD pipelines with GitLab CI, implementing quality gates, automated testing, and deployment workflows that cut configuration errors ~80%.
- Wrote Bash and Python deployment and operational scripts for customer automation, database backups, and high-availability failover procedures.
- Maintained 99.5%+ production uptime and reduced AWS infrastructure costs ~25% by right-sizing workloads, analyzing utilization data, and optimizing resource allocation.
- Implemented monitoring and alerting using Prometheus and Grafana, providing observability into application and infrastructure health.