Umesh Teja Nareddy

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PROFESSIONAL SUMMARY

Senior Cloud Reliability Analyst | AWS Certified DevOps Engineer - Professional

AWS Certified DevOps Engineer - professional with 5+ years of experience in cloud reliability, AWS operations, and automation. Proven ability to monitor and maintain live production environments, proactively resolve alerts, and serve as a subject matter expert (SME) for cross-functional teams. Skilled in orchestrating automated web application deployments, optimizing infrastructure for scalability and reliability, and applying advanced SQL and Linux expertise to maintain mission-critical systems.

WORK EXPERIENCE

Princess Cruises – Contract/Remote   **July 2021 – Current**

Role – AWS/DevOps Engineer

- Architected and implemented AWS solutions aligned with the AWS Well-Architected Framework, migrating 30+ legacy applications to cloud-native infrastructure using Terraform, reducing operational costs by 25%, enhancing scalability and reliability
- Built fault-tolerant, self-healing infrastructure across multiple Availability Zones using EC2, EKS, ECS, RDS, S3, IAM, and VPC, achieving 99.9% uptime through Auto Scaling, Route 53, and ELB.
- Developed end-to-end CI/CD pipelines with Jenkins, GitHub and ArgoCD, automating deployments and reducing manual intervention by 90%, resulting in 40% faster software delivery.
- Migrated Jenkins to containerized deployments for scalability, supporting development workflows across ReactJS, Node.js, and Java teams with custom tooling for testing and local environments.
- Implemented robust containerized environments on Kubernetes (EKS) and Docker, significantly enhancing deployment consistency and resource utilization.
- Developed infrastructure automation scripts using Python, Bash, and PowerShell for Windows and Linux environments, reducing provisioning time by 60% and ensuring compliance across multiple production and non-production environments.
- Created reusable Terraform modules and employed configuration management tools like Ansible and Chef to automate server provisioning, software installations, patching, and ensure consistency across all infrastructure components.
- Managed Kubernetes clusters using advanced deployment strategies (rolling updates, blue-green deployments), service meshes (Istio), ingress controllers, resource management, and container runtimes, Docker optimizing resource utilization and reducing downtime.
- Developed event-driven APIs using Node.js, Python, and AWS Lambda, while managing secure API communications through API Gateway and IBM API Connect on EKS, ensuring high availability and performance.
- Administered containerized deployments with Kubernetes (EKS) and Docker to improve resource management and deployment consistency across development, testing, and production environments.
- Applied advanced SQL tuning and database optimization for Oracle and SQL Server, improving query performance by 30% and ensuring high availability through clustering and backup strategies.
- Implemented SQL-based performance tuning and database maintenance strategies, improving query execution by 30%.
- Designed and implemented automated database backup strategies, HA clustering, and disaster recovery solutions to support business continuity.
- Enhanced application security posture by 50% through automated vulnerability scanning with Fortify, rigorous adherence to compliance standards (SOC 2, GDPR, PCI & HIPAA), and integration with AWS IAM and CloudTrail.
- Managed secure application deployments by leveraging AWS Certificate Manager (ACM) for automated SSL/TLS certificate handling, AWS Key Management Service (KMS) for encryption of sensitive data, and AWS Secrets Manager for centralized and secure storage of application credentials, reducing security vulnerabilities by 40% and ensuring compliance with industry standards.
- Monitored live production environments using AWS CloudWatch, Datadog, and Splunk, proactively responding to alerts and resolving 95% of incidents before customer impact.
- Extensive hands-on experience with network concepts such as IP addressing, DNS management, TCP/IP stack troubleshooting, SSH protocols, and firewall configurations.
- Configured load balancing solutions and maintained firewall rules, significantly improving application availability and security posture.
- Managed Active Directory domains, effectively supporting user authentication, security policies, group policy administration, and implemented Single Sign-On (SSO) and SSL certificate management to enhance security
- Implemented and managed Akamai as a CDN and WAF to enhance global content delivery, optimize web application performance, and enforce security controls by blocking malicious IPs, applying geo-blocking, and configuring rate-limiting rules.
- Acted as an SME for AWS cloud systems and Linux environments, advising cross-functional teams on resource optimization, cost savings of 20%, and operational best practices.

- Collaborated in regular development planning sessions, contributing to strategic cloud operations improvements and reliability initiatives.
- Gathered infrastructure and development requirements, delivering tailored AWS solutions to meet business and operational goals.
- Mentored junior engineers and contributed to knowledge sharing through documentation, architecture diagrams, and runbooks.
- Performed root-cause analysis and postmortems, reducing repeat incidents by 40% through the implementation of Site Reliability Engineering (SRE) best practices.

NJR Infotech Pvt Ltd.– Contract/Hyderabad, India　　　　　　　　　　　**June 2017 - December 2018**

Role – Build and Release Engineer

- Used Jira and ServiceNow as Defect Tracking Tools and directed the Release Management Calls to synchronize with the Developers, QA and DBA teams for successful releases
- Automated build and release processes using Jenkins, Bitbucket, Maven, and Terraform, reducing release errors by 30% and accelerating deployment cycles by 25%.
- Implemented robust version control and infrastructure management using Git, SVN, and scripting languages (Bash, PowerShell, Python), significantly reducing manual errors.
- Developed and maintained infrastructure scripts using Shell and Python for server provisioning and deployment automation.
- Collaborated closely with software developers, QA, and DBA teams, leading Release Management processes to ensure timely and successful deployments.
- Documented infrastructure updates clearly, facilitating effective inter-departmental collaboration and knowledge transfer.

SKILLS

•	Cloud Platforms	: AWS (EC2, S3, RDS, Lambda, IAM, VPC, Cloudwatch, Route53, ECS, EKS, SageMaker), GCP, Azure
•	Programming & Scripting	: Python, Bash, Shell, Ruby, JavaScript, PowerShell, Perl, SQL
•	IaC & Automation	: Terraform, AWS CDK, CloudFormation, Ansible, Jenkins, Cheff
•	CI/CD	: Jenkins, GitLab CI, ArgoCD, Maven, Docker, Kubernetes, Helm
•	Monitoring	: CloudWatch, Splunk, AppDynamics, Datadog, Prometheus, Grafana
•	Networking	: VPN, VPC, Subnets, Routing, ALB/NLB, DNS, CDN (Akamai), Load Balancers, TCP/IP, Firewall Configuration, Route53
•	Database	: AWS (RDS, Redis), PostgreSQL, SQL Server, MongoDB, MySQL, Oracle
•	Containerization	: Docker, Kubernetes(K8s), Helm, Istio
•	Security	: IAM, HIPAA, GDPR, SOX, PCI, DevSecOps, Vulnerability Scanning (Nessus, Fortify, Qualys)
•	Operating Systems	: Linux Systems, Unix, Windows, Ubuntu, RHEL
•	Logging	: ELK Stack (Elasticsearch, Logstash, Kibana), Splunk, PagerDuty, AppDynamics
•	Other Tools	: JIRA, ServiceNow, Redshift, Teams, Slack, Akamai, IBM API Connect, ChatGPT, MS Office, PyCharm, Visual Studi Code, Copilot

EDUCATION

Campbellsville University, KY.　　　　　　　　　　　　　　　　　Expected Dec 2025
Master of Science in Computer Science

Lawrence Technological University, Southfield, MI.　　　　　　　　Jan 2019 – May 2021
Master of Science in Construction Engineering Management

SRM University, Chennai, India.　　　　　　　　　　　　　　　　June 2013 – May 2017
Bachelor of Science in Civil Engineering

CERTIFICATIONS

- Amazon Web Services Solutions Architect Associate　　　　　　　Issued Feb 2022

- Amazon Web Services DevOps Engineer – Professional　　　　　　Issued Mar 2022