

# SENIOR CLOUD/DEVOPS ENGINEER – LEAD ENGINEER

## (AWS, TERRAFORM, DEVOPS WORKFLOW)

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### Professional Summary

- **10.5 Years** of Experience in IT, this includes **4+ Years as Module Lead/Lead Engineer**.
- **Over 6 Years** of Experience as **DevOps Engineer, Senior Cloud/DevOps Engineer**.
- Proficient in **AWS** cloud computing platforms.
- Experience with **Linux system administration** tasks such as user management, disk management, software installation, and package management.
- Proficient in scripting languages such as **Bash and Python**.
- Expertise in infrastructure-as-code (IAC) tool **Terraform** and Configuration Management tool **Ansible**.
- Proficient in using **Git commands**, including branching, merging, and resolving merge conflicts. Additionally, experienced in using **GitHub/Bitbucket** to manage repositories and collaborate with team members on code reviews, pull requests, and issue tracking.
- Experience with containerization technologies such as **Docker and Kubernetes**.
- Skilled in designing, building, and maintaining efficient and automated CI/CD pipelines using tools like **Jenkins and GitHub Actions**.
- Adept in leveraging **SonarQube** for static code analysis to ensure code quality and security by identifying and addressing issues such as bugs and vulnerabilities.
- Proficient in configuring and managing **Prometheus & Grafana** to collect and analyze metrics from various data sources and generate alerts based on defined thresholds.
- Skilled in creating and customizing dashboards, visualizations, and alerts in **EFK Stack** to monitor and troubleshoot application and infrastructure performance and issues.
- **Strong troubleshooting and problem-solving skills**.
- Integrated **DevSecOps tools and services** to enable automated application building, testing, securing and deployment.
- **Proficient in Istio**, an open-source service mesh platform, with experience in managing **microservices traffic, load balancing, service discovery, and implementing security policies** in Kubernetes environments.
- Experienced in creating and maintaining **Jira projects, boards, and workflows** to track project progress, identify bottlenecks, and optimize team performance to **facilitate Agile and Scrum Methodologies**.

### Education

- Master of Science (MSc.) in IT, 2011 from University of East London, London.
- PG Diploma (Computer Systems & Networking), 2009 from University of Greenwich.
- B. Tech (ECE), 2006 from T.R.R College of Engineering, Hyderabad, Affiliated to Jawaharlal Nehru Technological University.
- Board of Intermediate (M.P.C), 2002 from J.V.S Jr. College, Vishakhapatnam.
- Xth CBSE, 2000 from Kendriya Vidyalaya No.1, Nausenabaugh, Vishakhapatnam.

## Projects

- Automated **Golden AMI** through Packer & Ansible.
- Utilized **Terraform to design and deploy** a fully automated **EKS cluster infrastructure** on AWS, leveraging best practices for security, scalability, and reliability.
- Implemented **end-to-end CI/CD Pipelines** for Java & Node.js applications.
- Automated **installation of DevOps tools** through Ansible.
- Automated **Day-2 DevOps tasks** through Python Scripting.
- Implemented **Dynamically Increment of Application version** in Jenkins Pipeline.
- Integrated **Security Practices through DevSecOps tools** into the CI/CD pipeline to proactively identify and mitigate potential vulnerabilities.
- **Implemented GitHub Actions** as a replacement for Jenkins in a project, resulting in improved scalability and more efficient CI/CD pipelines through its cloud-based infrastructure and parallel task execution capabilities.

## Professional Accomplishments

- AWS Certified Solutions Architect – Associate
- Received **PAT ON BACK award** for completing In-Place upgrade of AWS Aurora MySQL DB successfully before EOL using Terraform & minimum downtime.

## Work Experience

**Infostretch Corporation (India) Pvt. Ltd. (Apexon), Hyderabad, Sep'22 – May'23**

**Position: Cloud/DevOps Lead Engineer**

**Job Profile: Infrastructure & Deployment Automation, and Kubernetes Admin.**

- Leading the **migration** of continuous integration and deployment processes from **Jenkins to GitHub Actions, resulting in increased efficiency, streamlined workflows, minimum maintenance and less cost.**
- Streamlined the **build and release process using GitHub Actions**, leading to 50% reduction in DevOps workflow and release time.
- Successfully executed a **cost-effective In-Place upgrade of Aurora MySQL** from version 5.6 to 8.0 using Terraform scripts, **ensuring minimal downtime** while meeting the End-of-Life requirements.
- Understanding of **Aurora architecture and performance tuning**, including optimizing query execution plans, managing database cache, and configuring read replicas.
- Ability to use AWS **monitoring and alerting tools**, such as AWS CloudWatch and Amazon RDS Enhanced Monitoring, to monitor database health and performance yielding to **proactive issue detection and resolution by 80%.**
- Integrated **Terraform scripts with CI/CD pipelines**, to automate Infrastructure creation and testing application workflow thus **reducing the manual intervention by 80%.**
- Familiar with **Aurora database security** and compliance, including encryption management, authentication/authorization, and auditing/logging, this **results to protecting the integrity of the database and maintain regulatory compliance.**
- Implemented **Kubernetes security best practices** to ensure secure containerization, including limiting access control, implementing network policies, pod security policies and using secure communication protocols such as TLS encryption.

Visionet Systems Pvt. Ltd. Bengaluru,

July'21 – July'22

Position: Senior Cloud/DevOps Engineer

Job Profile: Build and Release Management, Deployment Automation, and Kubernetes Administration.

- Experienced with container orchestration and the ability to **use Kubernetes** to manage complex containerized applications in a **scalable and fault-tolerant manner**.
- Proficiency with **container networking** and the ability to use Kubernetes to manage network resources, including **load balancers, ingress controllers**, and network policies.
- Understanding of **container security** and the ability to use Docker and Kubernetes to implement **security best practices, including container isolation, resource limits**, and network security **provoking to unauthorized access and security threats**.
- Ability to **troubleshoot Docker and Kubernetes issues**, including debugging application and container issues, analyzing logs and metrics, and diagnosing network and performance issues, leading to **resolve production issues by 90%**.
- Experience with pipeline as code and the ability to create, modify, and **troubleshoot Jenkins pipeline scripts**.
- Experience in writing and **managing Terraform code and Ansible playbooks, resulting in a 70% reduction** in manual server and application deployment, configuration, and maintenance.
- Skilled in **managing AWS Elastic Kubernetes Service (EKS) clusters, worker nodes**, and integrating with other AWS services.
- Proficient expertise with **Helm & Helmfile** to manage and release of **Helm Packages**.
- Implemented a **centralized logging and monitoring system** using Prometheus and Grafana, **enabling real-time monitoring of system performance**.
- Experience in writing **Python scripts** to automate common AWS tasks and workflows.
- Assisted in the development and implementation of the **DevSecOps Strategy** to include the integration of security controls and processes to ensure that security is incorporated throughout SDLC.
- Implemented distributed tracing using **Jaeger in Istio service mesh** to gain visibility into microservices communication and identify performance bottlenecks, and **utilized Kiali** for Istio service mesh visualization and monitoring.

TCS, Hyderabad,

Jan'18 – July'21

Position: Cloud/DevOps Engineer

Job Profile: AWS Administration, Infrastructure Automation & DevOps Engineer

Payroll: Ivytel Technologies Pvt. Ltd. Bengaluru,

- Proficiency in **AWS cloud administration**, including experience with **Amazon EC2, Amazon RDS, Amazon S3, Amazon VPC, AWS Lambda, API Gateway and services**.
- Understanding of **AWS security and compliance**, including knowledge of **IAM, KMS, AWS Config, and AWS Trusted Advisor**.
- Experience with **AWS networking**, including the ability to create and **manage VPCs, subnets, security groups, and other networking resources** on AWS.
- Familiarity with **AWS monitoring and logging** tools, including **CloudWatch** and **CloudTrail**, and the ability to use them to **monitor and troubleshoot AWS resources**.

- Skilled in **AWS cost optimization**, monitoring usage, identifying cost-saving opportunities, and optimizing resources for efficiency.
- Experience with the **AWS Terraform provider**, including the ability to use it to manage AWS resources and the ability to create custom **Terraform modules** for AWS.
- Proficient in **utilizing DevOps tools such as Git, Jenkins, Ansible & Terraform**, **reducing deployment time by 50%**.
- Created **Jenkins CICD pipelines** and integrated Jfrog and SonarCloud plugins for **faster feedback, improved code quality, greater efficiency and reliable releases**.
- Understanding of **DevOps practices** and the ability to use **Docker and Kubernetes** to build and deploy applications in a CI/CD pipeline.
- Configured **Docker as Jenkins agents** to provide a scalable and consistent build environment for CI/CD pipelines **ensuring consistent & flexible build environment**.
- Contributed to a **Kubernetes-based platform**, improving performance and reliability of a large-scale web app, and **reducing manual deployment and scaling processes**.
- **Trained development and operations teams on DevOps best practices** through continuous learning and conducted training sessions, **leading to increased collaboration and efficiency**.

**Mindtree LTD. Hyderabad,**

**Feb'15 – Dec'17**

**Position: Module Lead**

**Job Profile: AWS Cloud Administration & Infrastructure Automation**

- Manage and **maintain AWS infrastructure for a high-traffic e-commerce website**, that includes EC2 instances, RDS databases, and S3 buckets **by optimizing costs**.
- Configured and monitored networking components such as VPCs, subnets, and security groups **to ensure optimal performance and security**.
- Implemented **highly available, fault-tolerant and cost-effective solutions** using Elastic Load Balancers, Auto Scaling Groups and customized AMIs to **ensure application availability, scalability and handling varying levels** of the traffic.
- Implemented and maintained **backup and disaster recovery solutions** using AWS services such as AWS Backup and AWS Disaster Recovery **resulting in minimizing downtime and protecting data**.
- Used **Terraform to build infrastructure in multiple environments** such as Dev, Staging, QA, and Prod **reducing manual intervention by 70%**.
- Build the **Terraform modules** for the services in AWS. This **resulted in reducing the code time and re-usability of the modules**.
- Regulated **alarms in CloudWatch service** for monitoring the performance, CPU Utilization, disk usage etc. **enabling quick identification and resolution** of issues before impact the performance and availability of the system.

**Aster Minds Enterprise Solutions Pvt. Ltd. Hyderabad**

**May'14 – Feb'15**

**Position: Messaging Server Consultant (Client: Microsoft BLR, C2H)**

**Job Profile: Exchange & O365 Migration**

**Zenith InfoTech Pvt. Ltd. Mumbai**

**July'12 – May'14**

**Position: Server Engineer (L3)**

**Job Profile: Exchange Server Administration**