# **NITHIN KUMAR PASAM**

# **DevOps/SRE Engineer**

Atlanta, GA | pasamnithin@gmail.com | 505-410-1598 | LinkedIn | GitHub | Portfolio

### **PROFESSIONAL SUMMARY:**

Insightful and decisive DevOps/SRE Engineer with over 3+ years of experience, specializing in the complete lifecycle of enterprise application deployment. Proficient in workflow optimization techniques to enhance automation and efficiency within DevOps practices. Skilled in collaborating with cross-functional teams and enterprise clients to gather requirements, propose technical solutions, API integrations and document workflows aligning with business objectives.

- ➤ Cloud Technologies & Services: Proficient with AWS, including EC2, S3, EBS, VPC, ELB, and Autoscaling. Successfully migrated business operations from physical data centers to AWS, optimizing for Elastic Cloud Computing, Storage Services, and Load Balancing. Experienced in Kubernetes cluster management, EKS, and cloud-based resource monitoring with CloudWatch.
- ➤ Continuous Integration & Deployment (CI/CD): Engineered automated workflows within CI/CD pipelines, implementing user experience enhancements and coding best practices to optimize software engineering processes.
- ➤ Configuration Management & IaC: Skilled in using Ansible and Chef for configuration management with a strong focus on automation. Advanced knowledge of Infrastructure as Code (IaC) practices using Terraform and CloudFormation for efficient infrastructure provisioning and management.
- ➤ Containerization & Orchestration: Hands-on experience creating and managing Docker containers and Kubernetes clusters, ensuring high availability and scalability of microservices. Implemented container orchestration to automate deployment, scaling, and operations across clustered environments.
- ➤ Monitoring & Troubleshooting: Expert in system health and performance monitoring using tools such as Nagios, Splunk, ELK Stack, and New Relic. Proficient in log analysis, network performance optimization, and implementing disaster recovery and testing strategies.
- ➤ Agile & DevOps Methodologies: Solid experience in Agile, Scrum, and Waterfall project management methodologies. Strong advocate for integrating DevOps practices into software development life cycles to enhance efficiency and product quality.
- ➤ Version Control & SCM Tools: Experienced in managing source code versions and workflows with GIT, Subversion (SVN), and client tools like GitLab and GitHub across Linux and Windows platforms.

### **TECHNICAL SKILLS:**

| Cloud Environment      | Amazon Web Services (AWS)                  |
|------------------------|--|
| Infrastructure as code | Terraform, Ansible, CloudFormation         |
| AWS Services           | VPC, IAM, S3, Elastic Beanstalk,           |
|                        | CloudFront, DynamoDB, Direct Connect,      |
|                        | Storage, DMS, SNS, and SWF.                |
| Operating Systems      | Linux, Ubuntu, Windows.                    |
| Scripting              | Shell, PowerShell, Bash, JavaScript, J2EE, |
|                        | Python, HTML, XML, SQL, Servlets & JSP     |
| Version Control Tools  | GIT, GITHUB, GitLab, Subversion            |
|                        | (SVN), and Bitbucket.                      |
| Build Tools            | Maven, Gradle, Sonar, Nexus, and Ant.      |

| Application Servers              | WebSphere Application Server, Apache Tomcat, WebLogic.                 |
|----------------------------------|--|
| Containerization Tools           | AWS ECS, Docker, Kubernetes.   |
| Automation & Configuration Tools | Chef, Jenkins, TeamCity.   |
| Orchestration Tools              | Kubernetes, EKS.   |
| <b>Networking Protocols</b>      | TCP/IP, DNS, DHCP, Cisco, Routers/Switches, WAN, LAN, FTP/TFTP, SMTP.  |
| <b>Monitoring Tools</b>          | Nagios, AWS Cloud Watch, Splunk, and ELK.                              |
| Bug Tracking Tools               | JIRA, Azure  |
| Databases                        | Oracle, PostgreSQL, DB2, MySQL,<br>DynamoDB, SQL Server 2008/2012/2014 |

### PROFESSIONAL EXPERIENCE

Tata Consultancy Services (Client: Humana) | Dec 2021 – July 2023

Role: DevOps/SRE Engineer, AWS

**Responsibilities:** 

- > Spearheaded the development of 15+ infrastructure modules using Terraform, collaborating with enterprise clients and internal stakeholders to gather requirements, translate business needs into technical solutions, and enhance deployment efficiency by 30% and scalability for key services.
- > Successfully led the transition from Jenkins to GitLab for CI/CD pipelines, integrating with APIs and external systems in design workflows to reduce pipeline execution time by 20% and improve automation across environments.
- Established a comprehensive monitoring and alerting system using Datadog for AWS environments, achieving a 25% quicker issue detection and response rate, enhancing system reliability.
- ➤ Conducted thorough system alterations to improve deployment processes, leading to a 30% boost in scalability and efficiency for critical services.
- ➤ Developed custom Chef Cookbooks for Jenkins CI server setup, enhancing integration with a 40% reduction in setup time and streamlining development workflows by automating configuration tasks.
- Executed a seamless migration from AWS Route 53 to Cloudflare, aligning with company security policies while ensuring zero downtime and improving DNS response times by 15%.
- ➤ Orchestrated containerized environments for 10+ key applications using Docker and Kubernetes, improving QA and Dev environment efficiency by 50% and automating microservices deployment.
- ➤ Configured AWS VPC peering and enhanced security by managing user access with Cognito User Pools, strengthening network integrity, and reducing unauthorized access incidents by 90%.
- ➤ Gained proficiency in a wide range of DevOps tools, including Jenkins, GitLab, Team City, Datadog, Chef, Ansible, Docker, Kubernetes, Harness, and AWS services. Demonstrated expertise in deploying and configuring Java applications, using Maven for build configurations and Jenkins for deployment to Tomcat servers.
- ➤ Wrote technical solution documentation and business requirement specifications for infrastructure and API integration projects, ensuring alignment with enterprise client objectives.

**Environment:** Gitlab, Vault, Terraform, Airflow, Jenkins, Docker, Kubernetes, YAML scripting, Cloudflare, EKS, Lambda, EMR, S3, RDS, DynamoDB, VPC, Route53, API Gateway, CloudWatch, CloudTrail, Systems Manager, Kinesis, Elasticsearch service, IAM, Cognito, Certificate manager, SNS, SES, SQS, KMS, Cost Explorer.

### **XchangeTechs Star Alliance LLP | June 2020 – Nov 2021**

# **Role: DevOps Engineer**

# **Responsibilities:**

- > Created multiple Terraform modules to manage configurations, applications, and services, working closely with business teams to gather requirements and author decision workflows supporting enterprise IT operations.
- ➤ Used Ansible to automate provisioning of 50+ EC2 instances, reducing setup time by 60% and standardizing configurations.
- Managed deployment automation using Packer-Docker and Terraform to automate system operations. Handled work from the initial stage of development to create branches.
- ➤ Configured AWS IAM and Security Group in Public and Private Subnets in VPC.
- ➤ Created AWS Route53 to route traffic between different regions.
- ➤ Designed AWS Cloud Formation templates to create custom-sized VPCs, subnets to ensure the Successful deployment of Web applications and database templates.
- > Implemented automated local user provisioning instances created in the AWS cloud.
- ➤ Worked on various source code management activities using GIT, involving branching, merging strategy, daily merge, and remote repository.
- ➤ Built end-to-end CI/CD Pipelines in Jenkins to retrieve code, compile applications, perform tests, and push build artifacts to Nexus, and integrated Jenkins with the version control tools to pull the latest pushed code.
- ➤ Written Chef Cookbooks for various DB configurations to modularize and optimize products.
- ➤ Configuration, converting production support scripts to Chef Recipes, and AWS server provisioning using Chef Recipes.
- ➤ Configuring and deploying instances in AWS environments and Data centers, and working extensively with ECS, EKS, CloudWatch, SNS, and Elasticsearch to set up the required infrastructure and monitor it.
- ➤ Designed numerous cloud formation templates to create EC2 instances, RDS, Cloud Watch, S3, ELB, Auto-Scaling groups, Elasticsearch service, API-gateway, Lambda, ECS, EKS, and other services in AWS.
- ➤ Designed and implemented API integrations between AWS services and enterprise applications, enabling seamless decision flow automation and improving operational efficiency.
- ➤ Integrated Jenkins with tools such as GIT, Bitbucket, Artifactory, and Chef to implement a CI/CD pipeline.
- ➤ Worked on the transition project, which involves migration activities from Ant to Maven to standardize the build across all the applications.

**Environment:** AWS, Chef, Docker, Ansible, Jenkins, Terraform, Kubernetes, ANT, Maven, Ruby, Shell, Python, WebLogic Server 11g, Load Balancers, WLST, Apache Tomcat 7.x, Virtualization, Configured plug-ins for Apache HTTP server 2.4, Nginx, LDAP, JDK1.7, XML, GitHub, Nagios, Splunk.

#### CERTIFICATIONS

- > AWS Certified Solution Architect Associate
- > AWS Certified **Developer Associate**

### **EDUCATION**