# Sai Vamshi Krishna

# Mobile: 469-712-5101

**Email:** saivamshi.anasuri@gmail.com

**PROFESSIONAL SUMMARY**

AWS DevOps/Cloud Engineer Professional Summary: DevOps Engineer / AWS Cloud Engineer with 8+ Years of experience in IT industry comprising of Strong background in Linux/Unix, Containerization, VMWare, CI/CD process, Software Configuration Management (SCM) and Cloud Management.

* Created DevOps strategies in a mix environment of Linux (RHEL, CentOS, Ubuntu) servers along with Amazon Web Services (AWS) and in Linux/Unix administration and internals. Extensively worked on AWS Elastic Container Service and EKS to host containerized Applications. Devised Automation solution to update the Tasks and Services, provide in depth feedback and visualization while deploying the Microservices.
* Experience with IAC (Infrastructure as code) like Terraform and CloudFormation and with secrets/access management tools like Vault. Worked with DevOps related automation tools which include, application configuration management (Puppet, Ansible, Chef) and container management tools (Docker, AWS ECS, EKS).
* Expertise in Amazon Web Services (AWS) cloud platform and its services like EC2, S3, RDS, Lambda, VPC, VPN, Dynamo, EBS, ELB, SNS, EMR, Glacier, Auto-Scaling, IAM, Route53, AMI, Security-Groups, CloudFront, CloudWatch, and CloudFormation through AWS management console and AWS CLI (Command Line Interface).
* Deployed microservices, including provisioning AWS environments using Ansible Playbooks and Provisioned load balancer, auto-scaling group and launch configuration for micro services using Ansible. Created Ansible Playbooks and Puppet Manifests to provision Apache Web servers, Tomcat servers, Nginx, and applications on to clustered EC2 instances into multiple availability zones to provide HA.
* Installed and configured an automated tool Puppet that included the installation and configuration of the Puppet master, agent nodes and an admin control workstation. Extensively worked with Version Control Systems CVS, SVN (Subversion), GIT to improve continuous integration workflow, project testing, and deployments with Jenkins. Also, implemented code coverage and unit test plug-ins with SonarQube and Junit in Jenkins.
* Developed Terraform scripts to deploy the Cluster of Container Hosts on AWS to deploy suitable ECS cluster with required resources. Secured the Terraform state files in S3 with versioning enabled. Troubleshoot the build issue during the Jenkins build process and developed build and deployment scripts using ANT and Maven as build tools in Jenkins to move from one environment to other environments.
* Deployed the artifacts in Nexus central repository for internal deployments and managed Nexus repository for the current project created a new repository and provisioned it.

Implemented a Continuous Delivery pipeline with Docker, Jenkins and Git, where Jenkins can automatically start a new Docker container from each new Git branch.

* Worked to setup Jenkins as a service inside the Docker swarm cluster to reduce the failover downtime to minutes and to automate the Docker containers deployment without using configuration management tool. Managed Kubernetes, running Nodes, container snapshots and images, and used Kubernetes to provide a platform for automating deployment, scaling, and operations of application containers across clusters of hosts.
* Deployed application which is containerized using Docker onto a Kubernetes cluster which is managed by Amazon Elastic Container Service for AWS Kubernetes (EKS). Extensively worked with Scheduling, deploying, and managing container replicas onto a node using Kubernetes and experienced in creating Kubernetes clusters work with Helm charts running on the same cluster resources.
* Strong Knowledge in converting existing AWS infrastructure to serverless architecture (AWS Lambda, Kinesis) deployed via terraform or AWS Cloud formation Advice teams on steps required to prepare their project for the pipeline, including GitLab, Bit Bucket for Stash, branching strategy, DevOps, etc.
* Monitored the servers and checked the network performance using Nagios, Splunk for Resource Monitoring/Network Monitoring/Log Trace Monitoring. Experience in using ELK stack for deep search and data analytics, logging and managing system activities to identify server or application problems and identify any issues spanning multiple servers by correlating all the logs within a specified time frame. Good working experience on scripting languages like Shell, Perl, Python, PowerShell, Ruby, Bash.
* Ability in development and execution of XML, Shell Scripts and Perl Scripts. Extensive

experience in Installing, upgrading, and configuring Linux and Windows OS such as RHEL 5.x/6.x/7, CentOS, SUSE Linux, Ubuntu. Strong knowledge of DNS, DHCP and IP Addressing. Installation and configuration of various services like DNS, DHCP, NFS, LDAP and Send mail, Apache Web Server, Samba, SSH, HTTP, RPM & YUM package management. Experience in administering Active Directory and group policies.

**TECHNICAL SKILLS**

|  |  |
| --- | --- |
| **Operating Systems** | RHEL 5.x/6.x/7, Ubuntu, CentOS, Windows Server 2003/2008/2012 |
| **Cloud Platforms** | Amazon Web Services, Microsoft Azure. |
| **DevOps Tools** | Vault, Puppet, Ansible, Jenkins, Bamboo, Sonarqube, NexusIQ, Maven, ANT. |
| **Virtualization/Containerization Technologies** | VMWare ESXi, vCenter, Docker, Kubernetes, EKS, ECS |
| **Languages** | Shell Scripting, PowerShell, Python, Ruby, Groovy |
| **Databases** | Oracle, Prostgres SQL, DB2, MySql, DynamoDB, SQL Server 2008/2012/2014 |
| **Databases** | MySQL, NoSQL, MongoDB, DynamoDB, Elasticache |
| **Version Control tools** | Git, Gitlab, SVN and Bit Bucket |
| **Web/Application Servers** | Apache Tomcat, IBM WebSphere, Nginx |
| **Monitoring tools** | ELK, Nagios, Splunk, NewRelic, DataDog |

|  |  |
| --- | --- |
| **Bug Tracking Tools** | JIRA, Rally, Remedy, IBM Clear Quest, Bugzilla, HP Quality Center |
| **Cloud Platform Management Tools** | CloudHealth, CloudChecker, NutanixBeam, CloudAbility |

WORK EXPERIENCE

|  |  |
| --- | --- |
| **AT&T, Plano (Remote)** | **March 2022 – Present** |
| ***SR. AWS DevOps Engineer*** | |

# Responsibilities:

* Responsible for Implementing, Designing, Deploying the Architecture of AWS Blueprints, for On- boarding Clients, as well as new Applications to the Cloud
* Extensively worked on designing and automation across multi-Zones, Regions based applications utilizing AWS services like IAM Roles, Groups, Policies, VPC, EC2, EBS, Route53, S3, RDS, Dynamo DB, SNS, SQS, ECS, EKS, EFS, Lambda, Cloud Formation templates, CloudTrail, Cloud Confront, Config, Cloud Watch metrics, keeping an eye on high availability, fault tolerance, auto scaling techniques
* Setup end to end CI & CD cloud solution utilizing multiple AWS Stacks like Dev Stack include Code (Commit, Build, Deploy, Pipeline, Star, Artifact), AWS SDK stack, Application and Data Stack etc
* Implement Containerization and Robust deployment strategies using Kubernetes Service EKS in AWS for Cloud related deployments
* Executed local container-based deployments using Kubernetes objects and resources like HA proxy, Secrets, deployment strategies, Ingress controllers, Config-Maps, Pods, Containers etc
* Scheduling, deploying, and managing container replicas onto a node using Kubernetes and experienced in creating Kubernetes clusters, deployments with the help of Helm charts as a package/version manager
* Configure and setup entire AWS network using Terraform as IAAC, policies, SG's, NACL's, NAT Gateway, VPC, Peering, and connectivity within the cloud as well as hybrid env
* Automate AWS cloud Infrastructure, patching, software upgrade, maintenance of servers BareMetal, creating VM's, roles, custom modules etc
* Using Ansible, Terraform
* Creating custom Images using Docker Files, pushing them to private repository, Volumes creation, Snapshots, security checks, building Multi kernel support-based image builds
* Worked on automating Jenkins CI/CD Groovy Pipelines – build, deploy env based, release pipeline, creating artifacts, pushing to Artifactory, building custom Docker Images, and pushing to repository
* Integrated GIT repository with Jenkins and added webhooks and build triggers to automate build and deploy of apps on to tomcat, nginx application servers
* Created workflows using GitHub Actions for Continuous Build, and deploy to Dev, Test and Prod Environments based on Pull request
* Experienced in using Nexus and Jfrog Artifactory Repository Managers for Maven builds, Binary repository manager for Build artifacts
* Built real-time data management solution in AWS to copy/transfer data between hybrid environments, as well as track real time log streaming using Kafka, Spark, Amazon Elastic cache, Amazon Elastic search and Dynamo DB
* Fixing Network security related issues, Vulnerabilities etc, by proper enforcement of infosec policies, rotation of certs, keys, app authentication, cert generation, securing vault, etc
* Created dashboards to track App specifications like health, CPU, RAM, TTL, Latency, Errors etc, in several Monitoring tools like Splunk, Grafana, Prometheus and Datadog
* Eliminating risks using Security silo with OS hardening, DDOS attacks, IDP/IPS controls operations and monitoring, WAF, Advance endpoint security protection
* Implemented Hybrid CI/CD approach for where the source code repository was On-Prem which triggered the AWS Code Pipeline for build and deployments keeping connection private between the On-prem and AWS using the private endpoints
* Worked with setting up the AWS EKS cluster and ECS clusters for both EC2 type and AWS Fargate and automated the use deployment of this standard Clusters using the Service Catalog and CloudFormation
* Writing Rest Ful API's for integrating, security, monitoring, tracking build triggers and communicating with DevOps stack related tools
* Writing and automating physical, AWS cloud Infrastructure using multi scripts like shell, Bash, Perl, Python, Json, Yaml, Groovy, and Go Lang, CFT's etc., wherever there is a scope for automation, fill the gap to limit manual intervention
* Exposed to project management tools such as Central Station, PagerDuty, Slack, sprint meets, for on-call rotation, and incident management response and communication purposes
* Participating daily standup's, Sprints, attentive to On-call support, diving and fixing P1S, P1C's, spikes, documenting the new setup of DevOps tools, resolution to repeating break-fixes

**Environment**: Git, Maven, Vault, Terraform, Jenkins, Docker, Kubernetes, YAML scripting, Datadog, Prometheus, Grafana, Splunk, Ansible, Solr, Cloudera, Kafka, Spark

AWS: EKS, Lambda, EMR, S3, RDS, DynamoDB, ElastiCache, VPC, Route53, API Gateway, CloudWatch, CloudTrail, Systems Manager, Kinesis, Elasticsearch service, IAM, Cognito, Certificate manager, SNS, SES, SQS, KMS, Cost Explorer.

**ggfhfg**

|  |  |
| --- | --- |
| **UHG-MN (Remote)** | **June 2021 – Feb 2022** |
| ***AWS DevOps Engineer*** | |

**Responsibilities:**

* Configuring and deploying instances on AWS environment and Data centers, also worked extensively with ECS, EKS, Cloud watch, SNS and Elastic Search to set up the required infrastructure and monitor it
* Implemented AWS high availability using AWS Application Load Balancing (ALB), which performed balance across instances in multiple availability zones and automated AWS infrastructure via Puppet, Docker, and Bamboo
* Implemented, and configured a centralized logging solution for the organization, which is Elastic Search, Log stash and Kibana (ELK) that provides log analytics, full text search and visualizes the analytics in dashboards
* Wrote Ansible Playbook to create and manage configurations of AWS EC2 instances and test playbooks on AWS instances and created AWS Infrastructure using resources like VPC, S3, Subnets, Route Tables, Load Balancer etc., using Playbooks
* Migrated VMware VMs from on premise to AWS cloud and migrated applications using AWS services like EC2, S3 Bucket, Route53, ELB, EBS and monitored scalable infrastructure on Amazon web services (AWS) & configuration management
* Also, worked on application deployment and data migration on AWS (Cloud formation, Cloud Front)
* Implemented and maintained the monitoring and alerts of production and corporate servers/storage using AWS CloudWatch / Splunk
* Worked at optimizing AWS EBS volumes and EC2 instances and created multiple VPC instances
* Deployed applications on AWS by using Elastic Beanstalk
* 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
* Setup dashboards in NewRelic to visualize, analyze, and monitor using its features like APM, Mobile, Synthetics, Browser, and Infrastructure
* Automated the Microservices build and deployments such as Coupons, Inventory, etc., hosted on AWS ECS and EKS using AWS Code commit and Code deploy
* Managed several Docker Compose files to orchestrate the Docker microservices for a multitude of applications and host the services with light weight storage
* Administration of the CI/CD tools such as, Bitbucket, Bamboo, Jira, Nexus IQ, Sonarqube, etc
* Setup API-gateway, deployed DynamoDB and ingested member's information as a part of membership purchase history project, which will reduce load on Mainframe servers
* Managed repositories and packages to be pushed to all the environments using RedHat remote servers
* Developed many custom puppet modules in Ruby to customize the servers to organization standards
* Wrote custom Modules and Manifests, downloaded pre-written modules from puppet-forge
* Upgraded and Migrated Puppet community and Puppet Enterprise
* Provided Production support on behalf of the team during the holiday season, which is the peak traffic season being a retail client
* Environment: Bitbucket, Bamboo, Jira, Nexus IQ, Sonarqube, Jenkins, Docker, Kubernetes, Ansible, Puppet, YAML scripting, Ruby Scripts, Python, Perl, Shell, GIT, RPM/YUM, Websphere, DB2, Newrelic, ELK
* AWS: EC2, ECS, EKS, Lambda, ECR, S3, EFS, RDS, DynamoDb, ElastiCache, Redshift, VPC, Route53, API Gateway, CodeCommit, Code Build, CodeDeploy, CodePipeline, CloudWatch, CloudTrail, Systems Manager, Secrets Manager, Kinesis, Athena, Elasticsearch service, IAM, Cognito, Certificate manager, Pinpoint, SNS, SES, SQS, KMS, MobileHub, Cost Explorer.

**August 2019 – May 2021**

**Capital One ,TX**

***DevOps Engineer***

# Responsibilities:

* Developed various layers in Docker files to create images of all the successful build and stored in AWS Elastic Container Registry (ECR) which is later used to configure the Task definitions and Services in AWS ECS
* Managed the configuration of AWS ALB using Ansible to load balance the Microservices hosted on AWS ECS
* Configured Console for service discovery feature in AWS ECS clusters
* Experience working with IAM to create, manage AWS users and groups, and control access for DEV and Testing teams to ensure a secure AWS environment
* Also, created various AWS roles to enable automation for tools like Jenkins to use AWS services
* Designed AWS Cloud Formation templates to create custom sized VPC, subnets, NAT to ensure successful deployment of Web applications and database templates and provide highly durable and available data by using S3 data store, versioning, lifecycle policies, and create AMI's for mission critical production servers for backup
* Worked on creation and managing IT infrastructure and application stack using AWS Cloud Formation and writing the template file using JSON, and maintained RDS, Route 53, VPC, RDB, Dynamo DB, SES, SQS and SNS services in AWS cloud
* Defined AWS Security Groups, which acted as virtual firewalls that controlled the traffic allowed to reach multiple AWS EC2 instances
* Worked on multiple AWS instances to configure the security groups, Elastic Load Balancer and AMIs, and set up auto scaling to design cost effective, fault tolerant and highly available systems
* Deploying multi-stack software builds to various environments (VMs, Cloud instances, etc.) using automation tools like Ansible and Chef to minimize downtime
* Implementing a CI/CD (Continuous Integration /Continuous Delivery) framework using Jenkins, Maven & Artifactory in Linux environment and Integration of Git, Maven, Jenkins, Nexus, Confluence, Jira
* Installed packages on remote Agent less nodes through Ansible playbooks with Ansible roles, wrote Ansible playbooks using YAML scripting to launch AWS instances and used Ansible to deploy and manage web applications and created inventory in Ansible for automating the continuous deployment
* Configured Ansible Control Machine and wrote Ansible Playbooks with Ansible roles and used file module in Ansible playbook to copy and remove files on EC2 instances
* Containerized Jenkins and GIT servers using Docker images to leverage storage and clustered the various applications within Kubernetes to deploy, scale, and load balance the Docker containers
* Designed highly available and fault tolerant services in AWS Cloud utilizing Amazon Cloud Formation Templates and Terraform with pre-developed Python modules to automate the templates
* Hands on experience on Terraform key features such as Infrastructure as code, Execution plans, Resource Graphs, Change Automation
* Also, used Terraform to map more complex dependencies and rebuilt the broken infrastructure
* Created and maintained Python scripts for Automating Build and Deployment Process and Creating Web Based Application by Using Django Framework
* Utilize Nagios based Open-Source monitoring tools to monitor Linux Cluster nodes configured using Red Hat Cluster Suite
* Administration of Red Hat Enterprise Linux 6.x/7.x and CentOS includes installation, testing, tuning, upgrading, patching, and troubleshooting day-to-day issues
* Installed, tested, and deployed monitoring solutions with Splunk services
* Maintained, and managed assigned systems splunk related issues and administrators
* Worked on log parsing, complex Splunk searches, including external table lookups and used Splunk Enterprise REST API that uses HTTP requests to configure and manage Splunk instance, create and run searches
* Proficient working with NAS, SAN and DAS storage architectures, and expertise in migrating storage from other storage architectures on to SAN
* **Environment**: AWS, Azure, VMware ESXi 5.1/5.5 & 6.0, Jenkins, Docker, Kubernetes, Ansible, YAML scripting, Chef, Ruby Scripts, Python, Perl, Shell, GIT, JIRA, RPM/YUM, Apache, MySQL, JBoss, WebLogic, Tomcat, WebSphere, SSL, SMTP, netapp storage.

|  |  |
| --- | --- |
| **Innominds, Hyderabad, India** | **Sep2016 – Feb 2019** |
| ***Cloud Engineer*** | |

**Responsibilities:**

* Engineered and fully automated deployment, environment, network, and infrastructure utilizing Ansible, Docker, Kubernetes, Terraform, CloudFormation, and a range of AWS and Azure tools.
* Functioned Jenkins pipelines to drive all Micro services builds out to the Docker registry and then deployed it to Kubernetes. Created Pods and managed using Kubernetes.
* Converted a monolithic app to microservices architecture using Spring Boot. Deployed, Scaled, Configured, wrote manifest file for various Microservices using Kubernetes.
* Implemented the various Disaster Recovery strategies provided by AWS such as Backup and Restore, Pilot-Light, Warm Standby, and Multi-Site approach based on the situations.
* Implemented continuous integration and deployment system with Jenkins, AWS Code Deploy, Ops Works and monitored the infrastructure using AWS Cloud Watch.
* Extended On-premises infrastructure storage to AWS by using Storage gateways and created S3 buckets, configuring buckets with permissions, logging, versioning and tagging.
* Created the different CloudWatch Event Rules to automate the various tasks and set the set targets to Lambda, SNS, SQS, Step Functions. Configured monitoring, log aggregation, and alerting using CloudWatch, SNS, and S3.
* Experienced with using the AWS Services like AWS Config, SSM, Amazon Inspector, AWS Organizations.
* Implemented REST Microservices using Spring boot. Generated Metrics with method level granularity and Persistence using Spring AOP and Spring Actuator.
* Implements the Apache Kafka cluster as messaging system between the APIs and Microservices.
* Used Spring Core annotations for Spring Dependency Injection, Spring MVC for Rest API’s and Spring Boot for microservices.
* Developed code for Responsive web design in JavaScript using frameworks like Angular.js, React.js.
* Worked on version control systems GIT by using source code management client tools like, GitLab, GitHub, Bitbucket, and other command line applications.
* Containerize existing applications into Docker images and running them on Azure Kubernetes Service (AKS). Integrating with Azure DevOps for CI/CD.
* Executed the automation from commit to deployment directly into Azure VM using Azure DevOps pipeline for implementing a CI/CD pipeline.
* Designed, built, and maintained Log aggregation, Log parsing, Kibana and Grafana dashboard.
* Monitored the Splunk infrastructure for capacity planning, scalability, and optimization.
* Developed Azure pipeline jobs to create Azure Infrastructure from GitHub repositories containing Terraform code and created on-premises active directory authentication using
* automation with Ansible.
* Utilizing Azure Kubernetes Service (AKS) to deploy the Kubernetes cluster in Azure and created an AKS cluster in the Azure portal, with the Azure CLI and used template-driven deployment options such as Azure Resource Manager (ARM) templates and Terraform.

**Environment & Tools**: AWS, Docker, Ansible, Jenkins, Terraform, Kubernetes, ANT, Maven, 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, Java, Spring Framework, Spring Boot, JavaScript, Bootstraps, MongoDB, SQL.

|  |  |
| --- | --- |
| **Celgene- India** | **Jun2014 – Aug 2016** |
| ***Linux Administrator*** | |

**Responsibilities:**

* Performed system Firmware updates, Linux kernel, memory upgrades and along with RedHat Linux Kickstart Installation
* Worked on logical volume management creating VG, LV and mounting the file systems and extended file systems size in production servers
* Responsible for designing, administrating creating and documenting the new ACL policies enterprise LDAP
* Installation, configuration, administration and troubleshooting of Implementation VMware vSphere and administration in VMware environment deploying of Templates and Snapshots
* Developed automated processes that run daily to check disk usage and perform cleanup of file systems on UNIX environments using shell scripting and CRON
* Administration in VERITAS Volume Manager and VERITAS Cluster Server and maintaining DNS, Network File Services (NFS), and DHCP, printing, mail, web, and FTP services for the enterprise
* Scheduled tasks for vMotion and Storage vMotion of VM's and managed snapshots prior to planned patch install or upgrade
* Performance tuning for VMware ESXi hosts and Virtual Machine, setting up their CPU affinity rules, allocating resources and fine-tuning storage
* Creation of Oracle and MS-SQL server databases
* Backup and restore of databases in oracle and MSSQL Server DB's
* Installed and configured Red Hat, Centos on variety of different server platforms that contained Apache, MySQL
* Installed and configured Apache Webserver, WebLogic Application Server and Oracle databases
* Performed Installation, configuration, and administration of JBoss and Maria DB, MySQL
* Worked with shell scripting (sh, bash, csh, ksh), and developed Ruby, Perl and shell scripts for automation of various tasks.