** Sangeetha K**

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**Professional Summary:**

Over **8 years** of IT Professional Experience includes **DevOps**, **Cloud** technologies, **Continuous Integration/Deployment**, **Configuration Management**, **Cloud Migration**, **Cloud Architect**, **Source Code Management**, and **Virtualization** technologies which includes Troubleshooting Performance issues.

* Experience with legacy application migration and able to create next generation cloud reference architectures for legacy application migrations.
* Proficiently experienced with Amazon **AWS** Cloud Administration which includes services like: **EC2**, **S3**, **EBS**, **VPC**, **ELB**, **AMI**, **SNS**, **RDS**, **Redshift**, **IAM**, **Route 53**, **Auto scaling**, **CloudFront**, **Cloud Watch**, **Cloud Trail**, **Cloud Formation**, **NACL**, **Security Groups**.
* Built servers using **AWS Cloud Formation scripts**: Importing volumes, launching **EC2, RDS**, assigning roles and policies via **IAM**, implementing **Auto-Scaling**, load balancers (**ELB**s), **Security groups** in the defined Virtual Private Connection
* Experienced in setting up databases in **AWS** using RDS, storage using S3 bucket and configuring instance backups to **S3 bucket** by creating snapshots.
* Competence in designing AWS cloud models for Infrastructure-as-a-Service (IAAS), Platform-as-a-Service (PAAS) and Software-as-a-Service (SAAS).
* Provisioned the highly available **EC2** Instances using **Terraform** and **cloud formation** and wrote new plugins to support new functionality in **Terraform**.
* Hands on experience on **Azure** services such as **V Nets, Virtual Machines, Blob storage, Data Factory, data center, Storage Account, Auto-Scaling, deploying Web Apps, monitoring by Application Insights** and creating Web-Jobs.
* Experience in provisioning of **IaaS**, **PaaS** Virtual Machines and Web, Worker roles on Microsoft **AZURE** **Classic** and Azure Resource Manager (**ARM**), Deployed Web applications on Azure using **PowerShell** Workflow.
* Expertise on **Azure** VPN-Point to Site, Virtual networks, Azure Custom security, Endpoint security and firewall.
* Create clusters in **Google Cloud** and manage the clusters using Kubernetes(k8s). Using Jenkins to deploy code to Google Cloud, create new namespaces, creating docker images and pushing them to container registry of **Google Cloud**.
* Experience with structuring, arranging and sending arrangements on Microsoft Azure utilizing **ARM.**
* Experience in setting up the CI/CD pipelines using **Jenkins, Maven, Nexus, GitHub, CHEF, Terraform**, **AWS, Teamcity, QuickBuild, Docker and Buildforge**.
* Worked on the AWS Infra to build a script and which can be connected with various tools such as **CloudFormation** and **Terraform** to build the infra inside of AWS via code.
* Worked on Container management using **Docker** by writing Docker files and set up the automated build on Docker HUB and installed and **configured Kubernetes**.
* Experience with working on several Docker components like **Docker Engine, Hub, Machine**, Compose and **Docker Registry**.
* Utilized **Kubernetes** and **Docker** for the runtime environment of the **CI/CD** system to **build**, **test** and **deploy**.
* Good experience in writing **Helm Charts**, **Kubernetes** yaml files for deployment of microservices into **Kubernetes** clusters.
* Wrote **Ansible Playbooks**with **Python, SSH**as the Wrapper to Manage Configurations of **AWS Nodes**and Test.
* Extensively worked on **Jenkins** and **Bamboo** by installing, configuring and maintaining the purpose of **Continuous Integration** (CI) and for **End-to-End** automation for all build and deployments implementing **CI/CD** for database using **Jenkins** in **Groovy**.
* Created **Shell**scripts (Bash), **Ruby**, **Python**, **Groovy**, **YAML** and Power **Shell**for automating tasks.
* Experience in using **Splunk, AppDynamics, Dynatrace**, **ELK**, **Nagios**, IBM monitoring tools(TAM).
* Highly proficient SQL and RDBMS skills, including SQL Server, Oracle, DB2, MySQL, and **PostGre** SQL.
* Experience in **Linux Administration** (**Installation, Configuration**, Tuning and Upgrades of Linux (Red Hat and Oracle).
* Experience in Monitoring server performance with tools like **Nagios**, **Splunk**, **Dynatrace**, **Datadog** and resolved network related issues with manual commands and Implemented centralized logging management using **ELK** (Elasticsearch, Logstash, and Kibana) within **EC2**/ **ELB** for **Elasticsearch**.
* Experience in working with AWS Code Pipeline and Creating Cloud formation **JSON** templates which is converted to **Terraform** for infrastructure as code. Used infrastructure as Code with **Terraform** and **Ansible**.
* Experienced in **Waterfall, Agile/Scrum, Lean** and most recently **Continuous Integration (CI) and Continuous Deployment (CD) practices.**

**Technical Skills:**

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| --- | --- |
| **Operating Systems** | Windows, Linux, Unix |
| **Cloud Computing** | AWS (EC2, ELB, S3, Cloud formations), Microsoft Azure, OpenStack |
| **Version Control** | GIT, GitHub, Gitlab, Bitbucket, ClearCase, TFS. |
| **CI Tools** | Jenkins (Previously Hudson), bamboo, IBM build forge. |
| **Build Tools** | Ant, Maven, Gradle. |
| **Containerization Tools** | Docker, Kubernetes. |
| **Provisioning Tools** | Chef, puppet and Ansible. |
| **Network Protocols** | FTP, SSH, HTTP, TCP/IP, HTTPS. |
| **Application Servers** | Apache Tomcat, WebLogic, IBM WebSphere, JBoss. |
| **Web Servers** | Tomcat, Apache HTTP, WebLogic & WebSphere, Redhat Satellite, Kafka. |
| **Testing tools** | Selenium, Sonarqube. |
| **Databases** | Oracle, MS SQL Server, MySQL, MongoDB, Cassandra NoSQL Database, postgres. |
| **Languages/Scripting** | Bash scripting, Groovy, YAML, Power Shell Scripting, SQL, Java/J2EE, Ruby Python, Bash, .Net. |
| **Bug Tracking Tools** | JIRA, Atlassian, Remedy, Bugzilla |

**Certifications**

**AWS Certified solutions Architect – Associate**

**Digital Badge:**

[**https://www.youracclaim.com/earner/earned/badge/e2c5d4e5-a725-456e-b699-6d7ba0639a39**](https://www.youracclaim.com/earner/earned/badge/e2c5d4e5-a725-456e-b699-6d7ba0639a39)

**Professional Experience**

**AT&T, Atlanta, GA August 2019 – Present**

**Sr. AWS Cloud DevOps Engineer**

**Responsibilities:**

* Build and configure a virtual data center in the **Amazon Web Services** cloud to support Enterprise Data Warehouse hosting including Virtual Private Cloud (VPC), Public and Private Subnets, Security Groups, Route Tables, Elastic **Load Balancer**.
* Used **IAM** to create new accounts, roles and groups and polices and developed critical modules like generating amazon resource numbers and integration points with **S3, Dynamo DB, RDS, Lambda** and **SQS Queue**.
* Worked on various **AWS** services which includes importing necessary volumes, **launching EC2 instances, S3 for object static webpages and created security groups, auto scaling, load balancer, Route 53 and SNS as per architecture using IAAC tools like Cloud formation JSON Templates.**
* Responsible to Manage **IAM Policies,**providing access to different **AWS** resources, design and refine the workflows used to grant access.
* Written **Terraform** scripts for **AWS** infrastructure as a code using **Terraform** to build staging and production environments.
* Worked on the creation of custom **Docker** container, **tagging** and **pushing** the **images** and **Docker consoles** for maintaining the application of life cycle.
* Deployed **Kubernetes clusters** on top of Servers using **KOPS.** Managed local deployments in **Kubernetes,** creating local clusters and deploying application containers. Building/maintaining **docker container clusters** managed by **Kubernetes** and deployed Kubernetes using **helm charts**.
* Building/Maintaining Docker container clusters managed by **Kubernetes, Linux, Bash, GIT, Docker**. Utilized **Kubernetes** and **Docker** for the runtime environment of the CI/CD system to build, test deploy.
* Created **Ansible** playbooks for automatic deployment and configuration of Linux servers for test environment.
* Developed **Ansible Playbooks** to install and configure Apache Tomcat, Jenkins, Run deck and deployment automation. Installed Docker Registry for local upload and download of Docker images and even from Docker hub.
* Created **Ansible** supported **YAML** scripts to restart JBoss, Tomcat, and Jetty servers through GUI.
* Implemented **CI and CD** for application using **Jenkins** as CI tool for integrating different tools like **Github, Maven, Junit, and Nexus Artifactory** and used **Ansible** as configuration management tool for continuous deployment into testing, staging and Production Environment.
* Involved in writing and editing the existing **Maven** and **DOCKER** (Build.XML) files in case of errors or changes in the project requirements.
* Expertise in monitoring System/Application Logs of server using **Splunk**, Amazon **Cloud Watch, App Dynamics,** and **Nagios** to detect production issues.
* Established infrastructure and service monitoring using **Prometheus** and **Grafana**.
* Integrated **GitHub, Jenkins** and **Maven** in accomplishing continuous integration and configured Jenkins with webhooks.
* Worked with **RedHat OpenShift** Container Platform for Docker and Kubernetes. Used Kubernetes to deploy scale, load balance, scale and manage Docker containers with multiple namespace versions.
* Backed up and restored configurations and data of various tools (SVN, Jenkins), databases (Oracle and PostgreSQL) and servers (Windows and Linux) as required and good command on **GO language**.
* Managed **SVN repositories** for branching, merging and tagging and developing **Shell/Groovy** Scripts for automation purpose.
* Involved in setting up **JIRA** as defect tracking system and configured various workflows, customizations, and plugins for the JIRA bug/issue tracker.
* Integrated **Kubernetes** with **Hashicorp** Vault to inject configurations at runtime for each service using init, config sidecars and persistent volume sharing between app and config containers.
* Developed **Python**, **Perl** and **shell/bash** scripts for automation of the build and release process and to automate certain processes for the smooth process of a build tool like **Maven**. Created and wrote **shell scripts** (**Ksh, Bash), Ruby, Python** and **Power Shell** for setting up baselines.
* Developed a **Terraform** plugins using **Go language** to manage infrastructure which improved the usability of our storefront service.
* Using **Bash and Python**, included Boto3 to supplement automation provided by Ansible and **Terraform** for tasks such as encrypting EBS volumes backing AMIs.

***Environment:*** *GitLab, Jenkins, Nexus, Go lang, Maven, Gradle, Docker, Kubernetes, Ansible, VMware,**Web Logic, Tomcat, Cloud Watch, Perl, Oracle 10g/11g, Github, Grafana, Hashicorp Vault, Ruby, Git lab, Nagios, YAML, Splunk, JIRA, AppDynamics.*

**Fifth Third bank, Cincinnati, OH**

**Sr. Cloud DevOps Engineer September 2018 – August 2019**

**Responsibilities:**

* Configured **Azure cloud services, Azure storage, Azure active directory, Azure Service Bus**. Created and managed **Azure AD** tenants and configured application integration with **Azure AD**.
* Designed capacity and architecture plan to create the **Azure Cloud** environment to host migrated **IaaS** VMs and PaaS role instances for refactored applications and databases. Deployed infrastructure as a code (Ioc) application using ARM Template (JSON).
* Deployed **Azure IaaS** virtual machines (VMs) and Cloud services (**PaaS** role instances) into secure **VNets and subnets**.
* Deployed an **Azure Databricks** workspace to an existing virtual network that has public and private subnets and properly configured network security groups.
* Experience in provisioning of **IaaS, PaaS** Virtual Machines and Web, Worker roles on Microsoft **AZURE** Classic and **Azure Resource Manager** (ARM), Deployed Web applications on Azure using PowerShell Workflow.
* Maintenance and Vulnerability Management of **Hybrid infrastructure** and CI/CD using Chef - Cookbooks.
* Used **Terraform** to reliably version and create infrastructure on **Azure**. Created resources, using **Azure Terraform modules**, and automated infrastructure management.
* Worked on Container management by using **Docker** and by writing Docker files and set up the automated build on Docker HUB and installed and configured **Kubernetes.**
* Created additional **Docker Slave Nodes** for Jenkins using custom Docker Images and pulled them to Cloud, worked on all major components of Docker like **Docker Daemon, Hub, Images, Registry**.
* Managed **Kubernetes** charts using **Helm**. Created reproducible builds of the**Kubernetes** applications, managed **Kubernetes** manifest files and Managed releases of **Helm** packages.
* Developed an automated deployment tool for dev, QA and production environments using **Ansible** Allows new services to be deployed and released simply by developers including an Ansible playbook.
* Experience with **Jenkins** for **Continuous Integration** (**CI**) and deployment into Tomcat Servers. And worked in setting up Jenkin slaves for end to end automation.
* Implementing Continuous Integration and Continuous Delivery framework using **Bitbucket**, Maven, **Jenkins**, **Bamboo, Nexus, Control Tier,** Make in Linux environment.
* Build tools like Ant, Maven for the building of deployable **artifacts** (war & ear) from source code and Continuous Integration with Jenkins/Hudson bamboo, and Team city.
* Designed and implemented automated process of build and deployment for various .**Net** applications using various tools as per the needs of projects which includes TFS, GIT, Jenkins and Anthillpro.
* Worked on creating deployment scripts using **PowerShell** and automated multiple daily maintenance tasks using **PowerShell**.
* Integrated **Bitbucket** with **JIRA**for transition **JIRA** issues from within **Bitbucket** Server and monitored the JIRA issues in Bitbucket Server.

***Environment****: Azure, Terraform, JIRA, YAML, Bitbucket, Jenkins, Docker, Kubernetes, Ansible, Jboss, Maven Gradle, python, Chef, openshift, Open source, Selenium, .Net*

**Anthem, Virginia Beach**

**Sr. DevOps Engineer June 2017 - August 2018**

**Responsibilities:**

* Worked on release management & deployment tools like **AWS** Code Pipeline, Cloud Formation, AWS Code Deploy.
* Designed and implemented a SOA microservice with a JSON HTTP REST API for recent activity feeds using **AWS SQS**.
* Written **AWS CloudFormation** Templates for different services like CloudFront Distribution, API Gateway, Route 53, Elastic Cache, VPC, Subnet Groups, **Security Groups**.
* Configured **AWS IAM** and **Security Groups** in Public and Private Subnets in VPC, managed IAM accounts (with MFA) and IAM policies to meet security audit & compliance requirements.
* Created **Docker images** using a Docker file, worked on Docker container snapshots, removing images and managing Docker volumes.
* Configured **Kubernetes** Replication controllers to allow multiple pods such as Jenkins master server in multiple minions. Managed **Kubernetes** charts using Helm, managed Kubernetes manifest files and created reproducible builds of the Kubernetes application.
* Lead in Installation, integration and configuration of Jenkins **CI/CD**, including installation of Jenkins plugins.
* Implemented a Continuous Delivery pipeline with **Docker, Jenkins and GitHub,** whenever there is a change in **GITHUB**, our Continuous Integration server automatically attempts to build a new Docker container from it.
* Performed software configuration/release management activities for three different Java applications.
* Created **Jenkins** CI, CD pipelines for continuous build & deployment and integrated Junit and SonarQube plugins in Jenkins for automated testing and for Code quality check.
* Designed and implemented **Continuous Integration (CI)** process using tools like Hudson with approval from development and other affected teams. Defined processes to build and deliver software baselines for internal as well as external customers.
* Worked on Designing, Installing and Implementing Ansible configuration management and writing playbooks for **Ansible** using **YAML** and deploying applications. Test Playbooks on AWS instances using Python. Experimented playbooks for **Ansible** and deploying applications using Ansible.
* Creating scripts in **DSL Groovy** which integrate with Jenkins for Automation to create seed jobs.
* Working on the migration of mobile application from skava to cloud (**Google Cloud**) by making the chunk of code to microservices.
* Worked on **google cloud platform (GCP)** services like compute engine, cloud load balancing, cloud storage, cloud SQL, stack driver monitoring and cloud deployment manager.
* Worked on **GKE Topology** Diagram including masters, slave, RBAC, helm, kubectl, ingress controllers **GKE** Diagram including masters, slave, RBAC, helm, kubectl, ingress controllers.
* Installed, configured and maintained web servers like Apache Web Server and **WebSphere** Application Server on **Red Hat Linux**.

***Environment****: Java/J2EE, ANT, Maven, Subversion, ORM, Linux, AWS, OpenStack, Shell/Perl Scripts, Python, SCM, GIT, Gitlab, Jenkins, Ansible, Tomcat, Jira.*

**Value labs, Hyderabad, India**

**DevOps Engineer Feb 2016 – May 2017**

**Responsibilities:**

* Performed the automation deployments using **AWS** by creating the **IAM**s and used the code pipeline plugin to integrate **Jenkins** with **AWS** and created the **EC2** instances to provide the virtual servers.
* Written AWS CloudFormation Templates for different services like **CloudFront** Distribution, **API** Gateway, **Route 53**, **Elastic Cache**, **VPC**, **Subnet Groups**, **Security Groups**.
* Deployed MySQL database on **EKS** in **AWS** using deployment for failover replica.
* Wrote **Chef Cookbooks** for various **DB** configurations to modularize and optimize product configuration, converting production support scripts to Chef Recipes and **AWS** server provisioning using **Chef Recipes**.
* Used Configuration management tool **Puppet** to automate the management of servers in test and Upgraded **Puppet Masters**, Agents, and Databases.
* Implemented a Continuous Delivery pipeline with **Docker**, **Jenkins** and **GitHub**, whenever there is a change in **GITHUB**, our Continuous Integration server automatically attempts to build a new **Docker** container from it.
* Responsible for installation & configuration of **Jenkins** to support various **Java builds** and Jenkins plugins to automate continuous builds and publishing **Docker Images** to the **Nexus Repository**.
* Used **Git** for source code version control and integrated with **Jenkins** for **CI/CD** pipeline, code quality tracking and user management with build tools **Maven** and written **Maven pom.xml** build script.
* Wrote Ansible Playbooks with Python SSH as the Wrapper to Manage Configurations of AWS Nodes.

***Environments:*** *AWS (EC2, S3, Route 53, EBS, Security Group, Auto Scaling, and RDS, Aurora), GIT, Chef, Docker, Selenium, Maven, Jenkins, ANT, Puppet, Ansible, Python, Jira, Nagios.*

**Value Momentum, Hyderabad, Telangana**

**Build and Release Engineer August 2014 – January 2016**

**Responsibilities:**

* Possess strong skills in application programming and system programming using C++, C, QT and python on Windows and LINUX platforms using Design Patterns and Object-Oriented Programming concepts.
* Installed Jenkins/Plug-in for GIT Repository, Setup SCM Polling for Immediate Build with Maven and Maven Repository (Nexus Art factory) and Deployed Apps using custom ruby modules through Chef as a CI/CD Process. Created and configured jobs, script for custom command builder, agents in Bamboo.
* Installed and configured **Red Hat Linux**, Established and schedule activities in test and production environments. Experience in working GIT for branching, tagging, and merging.
* Deployment, implementation of **Subversion** (SVN) as source control, collaboration, and QA tool. Project management, versioning and blame/issue tracking using Subversion (SVN).
* Assemble **Release** Kit and complete all paperwork, including implementation/back out plans.
* Performed software configuration/**release management** activities for three different Java applications.
* Experienced with **release engineering**, configuration management in Tomcat web application environment.

***Environment****: Subversion (SVN), GIT, Ant, Maven, Bamboo, Veritas, LVM, .NET, PHP, Web Logic, Sonar, Jenkins, JBOSS, Perl Scripts, Shell Scripts, Bash, AngularJS, Nexus, Jira, Apache Tomcat, Cloud Foundry, Oracle Database, UNIX/LINUX, Java/J2EE, HTML.*

**BirlaSoft India Ltd, INDIA**

**Java Developer/Linux Administrator July 2012 – July 2014**

**Responsibilities:**

* Participated in the Analysis and Design of the application using UML/Rational Rose and Agile methodology.
* Worked to develop this Web based application entitled EMR in J2EE framework which uses Hibernate for persistence, Spring for Dependency Injection and Junit for testing. Used JSP to develop the front-end Apps.
* Designed and developed several SQL Scripts, Stored Procedures, Packages and Triggers for the Database.
* Involved in development of Web Service client to get client details from third party agencies.
* Installed, configured, and maintained Red Hat Linux 5.x/6.x and Centos servers using Kickstart and interactive installations procedures. Manage user and group accounts, grant access to users and lock user accounts.
* Installed firmware upgrades, kernel patches, system configuration, and performance tuning on Red Hat Linux servers.
* Worked with Network backup administrators to schedule and run full backups of the Linux servers.
* Installed Red Hat Enterprise Linux 4 on Sun V40 servers. Installed and upgraded packages using YUM and RPM. Configured Red Hat Enterprise Linux Systems to auto update.

***Environment****: Java1.5, Oracle10g, Python, Web Sphere, Load Balancers, Subversion, Oracle9i, PL/SQL, UML, Toad, Windows, TCP/IP, UNIX/LINUX, Oracle10g, Kernel, Windows, TCP/IP, GIT, Hudson, Java, Ant, Windows, Shell, WLST, Apache Tomcat 5.5.*