**Name: MOUNICA M**

**DEVOPS ENGINEER**

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**Summary:**

Around 6 Years of specialized IT experience in DevOps/Cloud, Linux administration, Expertise in Architecting and implementing Azure Service Offering, such as Azure cloud services, Azure storage, IIS, Azure Active Directory (AD), Azure Resource Manager (ARM), Azure Storage, Azure Blob Storage, Azure VMs, SQL Database, Azure Functions, Azure Service Fabric, Azure Monitor, and Azure Service Bus, Implemented AWS solutions using EC2, Route53, S3, Cloud Front, RDS, IAM, EBS, Elastic Beanstalk and Elastic Load Balancer, Auto scaling groups, Optimized volumes and EC2 instances, Cloud Watch, and Cloud formation, Hands-on experience with DevOps tools like Chef, Puppet, Ansible, Docker, Jenkins and AppDynamics.

**Professional Summary**

* Experience in Creating scripts using **Azure PowerShell** during automation and build process, and good working experience in Azure Logic apps, Service Bus and **SQL Database**.
* In depth experience on **SaaS**, **PaaS**, and **IaaS** concepts of cloud computing and Implementing using, **Azure** understanding the principles of **(SCM)** in **Agile**, **Scrum and Waterfall methodologies.**
* Experience in working on all cloud Platforms such **as Google Cloud Platform (GCP), Amazon Web Services (AWS), Azure, Pivotal Cloud Foundry (PCF)**and Implemented a Continuous Delivery framework using Jenkins, Ansible, GIT, SVN, Docker, Kubernetes, Maven and Nexus in Linux environments along with the installation, configuration and maintenance of **Pivotal Cloud Foundry (PCF) on AWS.**
* Experience on working with on-premises network, application, server monitoring tools like **Nagios, Splunk, AppDynamics** and on AWS with **Cloud Watch** monitoring tool.
* Expertise in deploying the code through web application servers like **Web Sphere, Web Logic, Apache Tomcat**
* Expertise in Deploying microservices, including provisioning AWS environments using Ansible Playbooks. Designed, Installed and Implemented Ansible configuration management system.
* Expertise in implementing and configuring **Nagios** for continuous monitoring of applications in the production environment and enabled notifications via emails and text messages.
* Experienced with container-based deployments using **Docker working** with **Docker images, Docker Hub and Docker registries and Kubernetes.**
* Experienced in using Jenkins pipeline to drive all **microservice** builds out to the docker registry and then deployed to Kubernetes, created pods and managed using**Kubernetes**.
* Experience in developing **CI/CD** system with Jenkins on Kubernetes container environment, utilizing Kubernetes and Docker for the runtime environment for the CI/CD system to build, test and deploy.
* Experience in Managing and Implementation of Linux (Centos, Redhat) and Windows (windows Server 2008/2012 R2), Middleware (Apache, PHP, Tomcat, JBoss and Fuse), and java applications.
* Experience in implementing the Docker for wrapping up the final code and setting up development and testing environment using Docker Hub, Docker Swarm and Docker Container Network.
* Experience writing various custom Ansible Playbooks and modules for Deployment Orchestration and Used Ansible Tower for scheduling playbooks and used GIT repository to store our playbooks.
* Worked on **Jenkins** to deploy code in Staging and Production environments and managed artifacts generated by **Jenkins and Nexus factor.**
* Extensively worked on Continuous Integration (CI) and Continuous Delivery (CD) process and implemented on tools like Jenkins along with Python Scripts to automate routine jobs.
* Experience in building end to end CI/CD Pipelines in Jenkins integrating SCM, compiling source code, performing tests and pushing build artifacts to **Nexus**.
* Experience in creating developing and testing environments of different applications by provisioning Kubernetes clusters on AWS using **Docker**, Ansible, and Terraform
* Experience with ORM's such as Django and SQLAlchamy, database design and normalization. Proficient skills of using PyUnit, PyTest for writing unit test cases.
* Exceptional Skills in Backend Development with **Python using the Django framework** with the latest in the technical communities and have a track record of delivering scalable backend solutions and APIs
* Proficient in developing complex **SQL queries, Stored Procedures, Functions, packages along with performing DDL and DML operations in the database**
* Good Knowledge of using **Data Science life cycle** from data preprocessing, data visualization, feature engineering, feature selection, and Machine learning Models, Model deployment
* Experience in using Scikit-Learn and Statsmodels in Python for Machine Learning and Data Mining
* Hands-on experience in using NLTK, OpenNL and StanfordNLP for Natural Language Processing and Sentimental Analysis
* Experience with **Docker**and **Kubernetes** on multiple cloud providers, from helping developers build and containerize their application **(CI/CD)** to deploying either on public or private cloud.
* Extensively worked on Jenkins for Continuous Integration and strong experience with integration of **Ant** and **Maven** Build as build tools for the building of deployable **artifacts (jar, war & ear)** from source code.
* Hands-On experience in the functional usage and deployment of application in **WebLogic**, **WebSphere** and **Apache Tomcat Server**
* Extensive experience in configuration, deployment automation with various App Servers like Oracle **WebLogic**, Web Sphere, Webservers like Apache, Tomcat and more modern **Web Containers like Nginx** etc.

**Technical Skills:**

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| **PROGRAMMING LANGUAGES & SCRIPTING LANGUAGES** | C, SQL, Java, PYTHON, SHELL, YAML, PERL, SHELL, BASH, |
| **OPERATING SYSTEMS** | WINDOWS, MAC OS, LINUX, UNIX, RHEL, CENT OS, SOLARIS, CITRIX XENSERVER. |
| **FRAMEWORKS** | DJANGO, FLASK |
| **DATABASES** | MS ACCESS, ORACLE, MYSQL, SQL SERVER, MONGODB, CASSANDRA, ORM LIBRARIES, |
| **VERSIONING TOOLS** | GIT, SUBVERSION (SVN), CLEAR CASE. |
| **BUILD TOOLS** | MAVEN, PYBUILDER |
| **CONTAINERIZATION TOOLS** | DOCKER, KUBERNETES |
| **MONITORING TOOLS:** | SPLUNK, NAGIOS, KAFKA. |
| **CI/CD TOOLS** | BAMBOO, GITLAB AND JENKINS. |
| **TICKETING TOOL** | JIRA, BITBUCKET, SERVICENOW |
| **TESTING TOOLS** | SELENIUM, UNIT TESTING, INTEGRATION TESTING |
| **AUTOMATION TOOLS:** | ANSIBLE, CHEF, TERRAFORM. |
| **WEB SERVERS** | WEB LOGIC, WEB SPHERE, APACHE TOMCAT, JBOSS. |
| **WEB SERVICES** | REST API’S, SOAP API’S, RESTFUL SERVICES |
| **FRONT-END TECHNOLOGIES** | HTML, CSS, JAVA SCRIPT, ANGULAR, REACT |
| **CLOUD TECHNOLOGIES** | AWS, AZURE, GCP |
| **DATA SCIENCE CONCEPTS** | STATISTICAL ANALYSIS, DATA PREPROCESSING, FEATURES ENGINEERING, FEATURE SELECTION, MACHINE LEARNING ALGORITHMS, NLP (NATURAL LANGUAGE PROCESSING), SENTIMENTAL ANALYSIS |

**PROFESSIONAL EXPERIENCE**

**CLIENT: PENNY MAC LOAN SERVICES| CA OCTOBER 2019 – PRESENT**

**SENIOR DEVOPS ENGINEER/ CLOUD**

**RESPONSIBILITIES**

* Worked on deploying and optimized two tier **Java, Python**web applications to **Azure DevOps CI/CD** to focus on development by using services such as **Repos** to commit codes, **Test Plans** to unit test, deploy **App Service**, **Azure Application Insight** collects health performance and usage data of the process, stored artifacts in blob storages.
* Involved in implementing a CI/CD pipeline using **Azure DevOps** (VSTS, TFS) in both cloud and on-premises with GIT, MS Build, Docker, Maven along with Jenkins plugins.
* Created CI/CD Pipelines **in Azure DevOps**environments by providing their dependencies and tasks. Involved in implementing and **Jenkins** pipelines into Azure pipelines to drive all micro services builds out to the **Docker** registry and then deployed to **Kubernetes**, Created Pods and managed using AKS**.**
* Used **Azure Kubernetes** Service to deploy a managed Kubernetes cluster in Azure and created an AKS cluster in the Azure portal, with the Azure CLI, also used template driven deployment options such as Resource Manager templates and Terraform.
* Worked on creating the **Docker** containers and **Docker** consoles for managing the application life cycle and configuring the Docker containers using **Kubernetes**. Used to build **Docker files** to create containers using Docker engine and Docker Machine environments, to deploy the microservices oriented environments for scalable applications. Automated Compute Engine and Docker Image Builds with Jenkins and Kubernetes.
* Involved in creating **Docker images** using a Docker file, worked on Docker container snapshots, attaching to a running container, removing images, managing Docker volumes, and managing directory structures in Docker registry.
* Worked on managing **Kubernetes charts** using Helm, and Created reproducible builds of the Kubernetes applications, managed Kubernetes deployment and service files and managed releases of Helm packages.
* Involved in providing consistent environment using Kubernetes for deployment scaling and load balancing to the application from dev through production, easing the code development and deployment pipeline by implementing Docker containerization with multiple namespaces.
* Implemented **Ansible** Tower for managing complex network deployments by adding control, knowledge and delegation to Ansible powered environments. Wrote Ansible Playbooks using Python SSH as Wrapper for Managing Configurations of my servers, Nodes, Test Playbooks on Azure instances using Python
* Involved in writing the **Ansible   playbooks** which are the entry point for Ansible provisioning, where the automation is defined through tasks using YAML format and even deployed applications and configure services such as Nagios, Tomcat and Apache.
* Worked on developing continuous delivery product release Pipeline, using tools such as **Jenkins**, and enable release and operations automation using **Ansible**. And installed Ansible Registry for local upload and download of Docker images and even from Docker hub
* Involved in using **Terraform** and **Ansible**, migrate legacy and monolithic systems to **Azure** and managing Ubuntu and RHEL virtual servers on **Azure** by creating **Ansible** Nodes.
* Involved in Setting up **AZURE Virtual Appliances**(VMs) to meet security requirements as software-based appliance functions (firewall, WAN optimization and intrusion detections).
* Worked with **Nagios** for **Azure Active Directory** & **LDAP** and Data consolidation for **LDAP users** . **Monitored** system performance using **Nagios**, maintained **Nagios** servers and added new **services & servers** .
* Used Python API for uploading all the agent logs into Azure blob storage. Managed internal deployments of monitoring and alarm services for the Azure Infrastructure (OMS).
* Involved on migrating SQL Server databases to SQL Azure Database using SQL Azure Migration Wizard and used Python API to upload agent logs into **Azure blob storage**.
* Worked on maintaining and coordinating environment configuration, controls, code integrity, and code conflict resolution and used **GIT** for branching, tagging and merging and resolved all the conflicts raised during merges
* Involved in working with Jenkins APIs to know various things like build status, count of builds, GIT commit version used by Jenkins builds and deployed Scripts using **MAVEN** as build tools in **Jenkins** to move from one environment to other environments.
* Used **Maven** to build rpms from source code checked out from Git repository, with Jenkins being the Continuous Integration Server and Artifactory as repository manager.
* Installing and administrating monitoring tools such as Nagios and managed with administered like JIRA/Confluence, plugins, and extensions.
* Used **JIRA** for tracking and updating project defects and tasks, issue reporting, status, and activity planning, creating **bugs tickets**, storyboarding, pulling reports from dashboard, creating and planning sprints

**Environment:** GIT, Maven, Docker, Kubernetes, Ansible, Jenkins, Nagios, Terraform, PYTHON, Java Script, Azure DEVOPS

**CLIENT: GILEAD SCIENCES| CA JULY 2018 – SEPTEMBER 2019**

**DEVOPS ENGINEER | AWS**

**RESPONSIBILITIES**

* Worked on setting up the life cycle policies to back the data from AWS S3 to AWS Glacier Experienced in Amazon EC2 setting up instances, virtual private cloud (VPCs), and security groups and worked with various AWS EC2 and S3 CLI tools
* Involved in creating S3 buckets and managing policies for S3 buckets and Utilized S3 bucket and Glacier for Archival storage and backup on AWS.
* Involved in creating **CI/CD pipelines** using Jenkins to deploy containerized applications using Docker in the AWS cloud for Dynamic scaling.
* Involved in building/Maintaining Docker container clusters managed by Kubernetes, Linux, GIT, Docker on AWS. Utilized Kubernetes and Docker for the runtime environment of the CI/CD system to build, test deploy.
* Configured AWS Identity & Access Management (IAM) by managing the users new accounts, roles, and groups. Supported AWS Cloud environment with AWS instances and configured Elastic IP and Elastic storage.
* Worked on Ansible control machine and wrote Ansible playbooks with Ansible roles. Used file module in Ansible **playbook** to copy and remove files on **EC2** instances
* Written **Ansible handlers** with multiple tasks to trigger multiple handlers and to decouple handlers from their names, making it easier to share handlers among Playbooks and Roles.
* Involved in writing **Ansible playbooks** by using **YAML** script to launch **AWS instances** and used to manage web applications, configuration files, used mount points and packages.
* Building/Maintaining Docker container clusters managed by Kubernetes, Linux, GIT, Docker, on AWS . Utilized Kubernetes and Docker for the runtime environment of the CI/CD system to build, test deploy.
* Worked on creating the **Docker**containers, Docker images, tagging and pushing the images and Docker consoles for managing the application life cycle and Deployed **Docker Engines** in Virtualized Platforms for **containerization** of multiple applications.
* Integrated **Docke**r container-based test infrastructure to **Jenkins CI** test flow and set up build environment **integrating** with **Git** and **Jira** to trigger builds using **Webhooks** and **Slave Machines**.
* Used **Jenkins**and pipelines to drive all micro services builds out to the **Docker-registry**and then deployed to Kubernetes, Created Pods and managed using **Kubernetes.**
* Wrote a python module to connect and view the status of an **Apache Cassandra**instance and Developed tools using python, Shell scripting, XML to automate some of the menial tasks.
* Generated **python Django**Forms to record data of online users and used Django APIs for database access.
* Managed **GIT**Artifactory for branching, merging, and tagging, resolved merging issues performance and adjusted the **Cassandra**yaml file for optimal performance and load balancing; responsible and technical review/factoring of schema design**, API client**deployment,
* Wrote **Python** scripts using the **Boto3** library to automatically sign up the instances in **AWS EC2**and **Ops Works stacks** and integrated with **Auto Scaling** with configured **AMI’s**
* Used log monitoring tool called ELK to see log information and implemented new ELK cluster for enterprise logging.
* Configuring and managing an ELK stack, set up the elastic search ELK Stack to collect search and analyze log files from across the servers and integration of Application with monitoring tool New Relic for complete insight and proactive monitoring.
* Created Python scripts to totally automate AWS services which includes web servers, ELB, Cloud Front distribution, database, EC2 and database security groups, S3 bucket and application configuration, this script creates stacks, single servers, or joins web servers to stacks
* Installed and configured servers using **Python** and **Bash**scripts and created documentation for the servers.

**Environment: GIT, Jenkins, Docker, Kubernetes, Jira, Ansible, Terraform, AWS (EC2, S3, ELK), Python, Maven, Cassandra**

**CLIENT: SYNDICATE BANK, HYDERABAD, INDIA MARCH 2016 – JANUARY 2018**

**DEVOPS ENGINEER**

**RESPONSIBILITIES**

* Created functions and assigned roles in AWS Lambda to run python scripts and wrote Lambda functions in Python for AWS Lambda and invoked Python scripts for data transformations and analytics on large data sets in EMR clusters and AWS Kinesis data streams
* Worked on configuring EC2 instances by writing Terraform templates, Chef cookbooks, recipes and pushed them on to Chef server.
* Writing shell scripts to handle server processing Migrating applications from .Net to Python Monitoring applications/servers performance with Splunk, Jenkins, etc.
* Implemented a production ready, load balanced, fault tolerant, auto scaling **Kubernetes AWS**infrastructure and **microservice**container orchestration.
* Automated the cloud deployment using **Chef, Python** and **AWS Cloud Formation** Templates. Used **Chef** for unattended **bootstrapping** in **AWS**.
* Worked on Designing and Setting-Up the Splunk Architecture in the organization and creating Applications on Splunk to analyze the Big Data.
* Used both Splunk for monitoring and analyzing log information. Worked on in Troubleshooting Splunk search, quotas, monitor Inputs, WMI Issues, Splunk crash logs and Alert scripts.
* Implemented **Docker** - **maven**-plugin in **Maven pom.xml** files to build **Docker images** for all **microservices** and later used **Docker File** to build the **Docker** images from the **Java jar files** also Created **Docker** images using a **Docker File**, worked on **Docker container** snapshots, **removing** images and managing **Docker volumes**
* Worked with **Docker swarm** and compose in building distributed Docker containers and able to script Docker steps that can be used for automated deployment for developers in Local, staging and production after a continuous integration build.
* Worked on Docker container snapshots, attaching to a running container, removing images, managing Directory structures, and managing containers. Built Docker files to create containers using Docker engine and Docker Machine environments, to deploy the microservices oriented environments for scalable applications.
* Prepared Continuous Integration (CI) and Continuous Delivery (CD) process implementation using Jenkins along with Python and Shell scripts to automate routine jobs.
* Used **Git**for source code version control and integrated with **Jenkins for CI/CDpipeline**, code quality tracking and user management with build tools **Maven**.
* Worked on installation & configuration of Jenkins to support various Java builds and Jenkins plugins to automate continuous builds and publishing **DOCKER**images to the Nexus repository.
* Created/configured many jobs in Jenkins to help CI/CD pipelines using many plugins like **DSLplugin**, parameterized **Trigger plugin**, pipeline view plugin, Extended email plugin etc
* Worked on using Collections in **Python** for **manipulating** and **looping** through objects, Created and maintained the **Python** deployment scripts for **Tomcat**web application servers
* Worked on **Database** Administration activities such as installation, database creation, sizing, backup and recovery, performing turning and capacity planning

**Environment:** AWS, Docker, Jenkins, GIT, Splunk, Linux (centos), Python, Chef, Maven

**CLIENT: HINDUSTAN UNILEVER, MUMBAI, INDIA MAY 2015 – FEBRUARY 2016**

**SYSTEM ANALYST**

**RESPONSIBILITIES**

* Designed, wrote and maintained systems in **Python scripting** for administering by using **Jenkins** as a full cycle **continuous delivery** tool involving package creation, distribution, and deployment onto **Tomcat application** servers via shell scripts embedded into **Jenkins** jobs.
* Integrating Defect tracking tool JIRA with Confluence and Jenkins CI server for identifying, logging and, tracking and documenting defects/issues in real-time.
* User account management and administration Troubleshooting User’s login and home directory related issues reset password and unlock user accounts in **Linux**Systems.
* Developed automation scripting in **Python**(core) using **Puppet**to deploy and manage **Java**applications across **Linux**servers.
* Developed automated scripts using **Python, Shell Scripting** for data collection and transfer to databases.
* Automated installing the Linux packages and administering Linux service using **Chef** and automating product installation configuration.
* Worked on configuring Puppet master servers and installing Puppet client software on Linux servers and deployed Puppet, Puppet Dashboard, and Puppet DB for configuration management to existing infrastructure
* Maintained build related scripts developed in **ANT, Python and shell.**Modified build configuration files including **Ant’s build.xml**.
* Used ANT as a build tools on java projects for the development of build artifacts on the source code and Worked with development team to migrate **Ant scripts to Maven.**

**Environment**: **Python, Puppet, Jenkins, Tomcat, ANT, Maven**

**CLIENT: RADIANT INFO SYSTEMS, HYDERABAD SEPTEMBER 2014 – APRIL 2015**

**SYSTEM ANALYST**

**RESPONSIBILITIES**

* Installation and administration of Linux systems, upgrading and configuring RedHat Linux 5.x, 6.x,7.x using Gold Disk Image.
* Management and Implementation of Linux (Centos, RedHat) and Windows (windows Server 2008/2012 R2), Middleware (Apache, PHP, Tomcat, JBoss and Fuse), and java applications
* Build out server automation with Continuous Integration - Continuous Deployment tools like Jenkins/Maven for deployment and build management system.
* Creating users, groups and setting file permissions to different groups and users and created & migrated SSH keys for application ID to enable sftp/scp capability.
* Creating Docker images from Centos Linux as per requirement of the product/service and storing those Docker images to the ECR or Nexus Repository.
* Creating a change requests, work orders and problem tickets using BMC Remedy tool and getting approvals from process owners.
* Handled the scheduling tasks (cron jobs and task scheduler) for the scripts for various purposes.
* Configured kickstart server and updating/applying patches to the servers using Red Hat Satellite server.
* Install host firewall IP Tables for RHEL and Centos.
* Managing Automation toolset such as Puppet by writing Manifests and modules.
* Bash Shell scripting for various automation of system administrative tasks.
* Delivery, Release planning, procedures, scripting automation.
* Responsible for design and maintenance of the Subversion (SVN) Repositories and the access control strategies.

**Environment**: Linux (Red Hat Enterprise, Cent OS), Windows 2000/NT, Subversion, Python, shell scripting, Jenkins, BMC Remedy.

**EDUCATION**

**MASTER OF SCIENCE: DATA SCIENCE NATIONAL UNIVERSITY, SAN DIEGO, CA**