**Sr. DevOps Engineer**

 **Name: Uma**

 **Phone:313-744-8152**

 **Email:**umaktechops@gmail.com

**PROFESSIONAL SUMMARY:**

* Around 7+ **years** of experience in IT industry with major focus on **Configuration,** **SCM**, **Build/Release Management** and as **AWS** **DevOps** operations Production and cross platform environments.
* Involved in design and implementation of **Continuous Integration, Continuous Delivery, Continuous Deployment (CI/CD), DevOps** tool chain and **DevOps** processes for **agile** projects.
* Proficient In **AWS** Cloud platform and its features which includes **EC2, VPC, EBS, AMI, SNS, RDS, EBS, Cloud Watch, Cloud Trail, Cloud Formation AWS Config, Autoscalling, CloudFront, IAM, and R53.**
* Scaling through data-driven capacity planning, within both physical data centers and Cloud Experience writing **Shell**, **Perl, Ruby** and **Python** scripts to automate the deployments.
* Worked in different software development life cycles using the **Waterfall, Agile methodologies** and have great experience with the tools like **GITHUB, Jenkins, JIRA, Subversion (SVN**) etc.
* Extensive experience in virtualization platforms with **hypervisors** like VMware **vSphere 5.x, ESX / ESXi 3.x,4.x, 5.x, VMware Workstation**, and **Hyper-V** administration.
* Strong working knowledge of various **GCP** infrastructure design and implementation strategies
* Setting up GCP instances with terraform.
* Hands on **migration** experience in **AWS to GCP**
* Ability to manage **SCSQLM** processes which include **compiling, packaging, deploying** and application configurations.
* Used **Kubernetes** to deploy scale, load balance, scale and manage **Docker** containers with multiple namespace versions.
* Implementing a **Continuous Delivery** framework using **Jenkins, Chef, Maven** in **Linux environnement**
* Expertise in Application Deployments & Environment configuration using **Chef, Puppet**
* Expertise in Source Code Management tools like **SVN**, **GIT**, and **TFS**.
* Strong knowledge on **CI** tools like **Jenkins, Hudson** and **Cruise control.**
* Extensive experience in **SCM** concepts: Branching, Merging, Check-in/out, Labeling, Tagging, Packaging, Baselines and Releases.
* Efficient in **Maven** for the build process and **Bamboo** as continuous integration build tool and Worked on build failures on trouble shooting.
* Prototype **CI/CD** system with **GitLab** on utilizing **Kubernetes** and **docker** for the runtime environment for the Setting up data in **AWS** using **S3** **bucket** and configuring instance backups to **S3 bucket**.
* Expertise in Java build tools like **ANT, MAVEN, GRADLE** for the building of deployable artifacts such as (jar, war & ear) from source code and **MS-Build** for **.Net**.
* Have technical exposure on **Cassandra CLI** like creating Key Spaces and Column Families and analyzing fetched data.
* Used **Terraform** in migrating legacy and monolithic systems to **Amazon Web Services**.
* Worked on **Terraform** Interface between **Jenkins** and **AWS** to implement auto scaling, **cloud watch in Jenkins**.
* **Docker** container deploying micro services, and scaling the deployment using **Kubernetes**.
* Expertise in Querying RDBMS such as **Oracle**, **MY SQL** and **SQL Server** by using SQL for data integrity.
* Good Knowledge on **Groovy** scripting**.**
* Familiarity with **Kubernetes,** **Mesos**, **Docker Swarm**.

 **Technical Skills:**

**Operating Systems : Windows 98/XP/NT/2000/2003/2008, UNIX, LINUX, CentOS,Ubuntu**

 **RHEL,SOLARIS,SUSE, Ubuntu**

 **Source control tools       : Subversion, Clear case, GIT and Perforce.**

 **Build tools                         : ANT, Maven, Gradle, Bamboo.**

 **CI tools                               : Hudson, Jenkins and Build Forge, Cruisecontrol.**

 **Deployment tools           : Chef, Puppet, Ansible.**

 **Containerization/Virtualization : Docker, Packer, VMware, VSphere.**

 **Orchestration Platforms : Kubernetes**

 **Repositories                      : Nexus, Artifactory.**

 **Languages                           : C, C++, Perl scripting, Shell scripting, HTML, Python,**

 **Tracking tools                  : Jira, Remedy, Clear Quest.**

 **Web servers                      : Web logic, Web Sphere, Apache Tomcat, JBOSS, Nginx.**

 **Monitoring tools : Nagios, Splunk, NewRelic, logic monitor.**

 **Databases                        : Oracle, SQL Server, MYSQL, DB2,MONGODB**

 **Cloud Platform : AWS, GCloud, Right Scale.**

**Professional Experience:**

**Title: Cloud/Devops Engineer**

**Client: CapitalOne,McLean,VA Feb 2020 -Present**

**Responsibilities:**

* Developed strategy for **cloud migration**and implementation of best practices using AWS services like **database migration service, AWS server migration service**from on-premises to cloud.
* Designed and converted existing AWS infrastructure to **‘Server-less’**architecture deployed via **Terraform** which includes **AWS Elastic Beanstalk**for app deployments.
* Worked on AWS **Lambda**with Amazon **Kinesis**and integrated **Dynamo DB**using **Lambda**for value storage and for streams backup.
* Developed **Terraform** scripts for build, change and version infrastructure as code using **AWS** as provider and launched multi-tiered stack to be provisioned and configured with **Terraform** scripts.
* Designed AWS cloud Formation templates to create custom sized **VPC,**to set up **IAM policies**for **users, subnets,**NAT to ensure successful deployment of **Web applications, database templates and Security groups**using **Python (BOTO & AWS CLI)** and **JSON Templates**.
* Implemented and maintained the **monitoring and alerting**of production and corporate servers/storage using **AWS CloudWatch/Nagios**and assigned **AWS elastic IP addresses**to work around host or availability zone failures by quickly re-mapping the address to another running instance.
* Setup **GCP Firewall rules**to allow or deny traffic to and from the **VM's instances**based on specified configuration and used GCP cloud **CDN (content delivery network)**to deliver content from GCP cache locations drastically improving user experience and latency.
* Created clusters of instances running on **Kubernetes**and pushing them into Google Cloud using **Jenkins**and deploying them into hosting environments using **GCP'**s Containers as a Service ( **CAAS**).
* Maintained and developed **Docker images**for a tech stack including **Cassandra**, **Kafka**, **Apache**, and several in-house written **Java**services running on **Google Cloud Platform (GCP**) on **Kubernetes.**
* Performed day-to-day operation and troubleshooting of **VMs**and **Docker swarm**in **Google Cloud Platform.**
* Created and deployed **Kubernetes pod**definitions, **tags, labels, multi-pod container replication.**Managed multiple Kubernetes pod containers scaling, and auto-scaling. Used the **Kubernetes dashboard**to monitor and manage the services.
* Worked on installing, configuring and managing Docker Containers, Docker Images for Web Servers and Applications and Implemented **Docker-maven-plugin**in Jenkins and **maven pom to build Docker images**for all **microservices**and later used Docker file to build the Docker images from the java jar files.
* Created Docker images using a docker file, worked on Docker container **snapshots,**removing images and managing **Docker volumes**and virtualized servers in Docker as per QA and Dev-environment requirements and configured automation using Docker containers.
* Worked on **Docker-Compose, Docker-Machine**to create **Docker containers**for testing applications in the QA environment and automated the **deployments, scaling**and management of containerized applications.
* Worked with **Ansible**and **Packer**to build **Jenkins**master **AMI**. This includes **Groovy**to configure plugins configuration files and jobs deployed with **DSL**plug-in, **Ruby**and **Vagrant**file to help with testing of that **AMI**and a **Python script**to help rotate old versions of the **AMI.**
* Installed and Implemented **Ansible configuration management system.**Used Ansible to manage **Web applications, Environments configuration Files, Users, Mount points,**and **Packages**, worked with automation/configuration management using Ansible and created playbooks in **YAML**to automate the development processes..
* Added required images to **Vagrant**and created servers out of Images for testing and Automated infrastructure build-out and systems provisioning using **Ansible and Ansible Tower**.
* Run **Jenkins**on-top of **Kubernetes**to drive all automation with web-hooks tied into our **Bitbucket**system..
* Automated the Migration of the **Jenkins** server to **AWS** and moving of the jobs from the **SCM Bitbucket**.
* Created test branches from the **master branch** of each repository on **Bitbucket** to perform testing of**Gradle** upgrade to LSR and then assisted **DEV** teams to do the same successfully.
* Worked with different scripting languages such as**Groovy, Python** as a part of writing scripts for the automation tasks like release processes, applications migration, and monitoring application health during migration etc.
* Deployed and configured **JIRA**, both hosted and local instances for issue tracking, workflow collaboration, and tool-chain automation.
* Used monitoring tools like **Nagios**to improve application performance, helps to get the **visibility & business** context to meet business demands.
* Well versed with **Software development (SDLC), Test life cycle (STLC),**and **Bug life cycle**and worked with testing methodologies like **agile methodology (SCRUM)**with an in-depth understanding of the principles and best practices of Software Configuration Management (SCM).

**Environment:**AWS, MAVEN, Nexus, Ansible, Chef, Terraform, Jenkins CI/CD, Nagios, Jira, SHELL, Python, Ruby, VPC, Autoscaling, Apache, JBoss, Nginx, Tomcat, Bitbucket, Docker, Kubernetes, GCP, Service now, Cassandra, Kafka, Blue/green deployment.

**Title: AWS/Devops Engineer**

**Client: Venmo, NYC June 2019 – Jan 2020**

**Responsibilities:**

* Responsible for **Implementation, design, architecture,** and support of cloud-based server and service solutions.
* Worked heavily with AWS and its infrastructure, **including EC2, AMI, ECS, ElasticCache, ElasticSearch, RDS, VPC implementation, IAM, KMS, WAF, CloudTrail, CloudWatch, S3**, CloudFront, AWS CLI scripting, **ELB, Route 53, Lambda**, DynamoDB, Elastic Beanstalk, SQS, SNS and Security group management.
* Collaborate in the **automation** of AWS​ infrastructure via **Terraform​ and Jenkins​** - software and services configuration via **chef**​ ​cookbooks​.
* Worked on setting up new tools such as **Kubernetes** with **Docker** to assist with auto-scaling, continuous integration, rolling updates with no downtime.
* Used **AWS** Code Pipeline to design and implement a Continuous Integration and Delivery Pipeline on **AWS**.
* Implemented multiple **CI/CD** pipelines as part of DevOps role for our on-premises and cloud-based software using **Jenkins, Ansible and AWS/Docker**.
* Created and managed a **Docker** deployment pipeline for custom application images in the cloud using **Jenkins.**
* Created S3 buckets and managing policies for S3 buckets and Utilized S3 bucket for storage and backup on AWS. Extensive knowledge in migrating applications from internal data center to AWS.
* Initially thought of using **Kubernetes** the finally decided to use **Docker** swarm because **Docker swarm** is integrated with **Docker daemon**.
* Used Ansible as Configuration management tool, to automate repetitive tasks, quickly deploys critical applications, and used **Ansible** Tower to monitor automation activity and manage **cloud** infrastructure
* Using **Cloud Trail**, **Cloud Passage**, **Check Marx**, **Qualys Scan** tools for AWS security and scanning.
* Worked with development engineers to ensure automated test efforts are tightly integrated with the build system and in fixing the error while doing the deployment and building.
* Setup NFS servers as **OpenShift** storage backend and configured various storage claims for developers.
* Exposed to all aspects of software development life cycle (**SDLC**) such as Analysis, Planning, Developing, Testing, and Implementing and Post-production analysis.
* Managed **Kubernetes** charts using **Helm** and Created reproducible builds of the **Kubernetes** applications, managed Kubernetes deployment and service files and managed releases of **Helm** packages.
* Created **Python** scripts to automate AWS services which include **Web servers, ELB, Cloud front distribution, databases, security groups** and application configuration.
* Configured and used **ELK**, **Nagios** for monitoring and log analysis.
* Build and configure a virtual data center in the **Google cloud platform** to support Enterprise Data Warehouse hosting including **Virtual Private Cloud (VPC),** Public and Private Subnets, Security Groups, Route Tables, Google Cloud Load Balancing.
* Scoped use cases designed a scalable schema, and deployed a **DynamoDB** database, Amazon’s hosted **NoSQL** database solution.
* Automating the Google Cloud Platform Infrastructure using GCP Clould Deployment Manager.
* Experience in DevOps tool like **JIRA**, **Jenkins**, **Maven**, **mysql**, **Artifactory** and **Gradle.**
* Working with the development team to help them architect and implement **Docker and Mesos**
* Configured **Jenkins** with Test environment for unit testing with **Junit**, functional/quality check with **Selenium** and performance/load tests using **JMeter** after that pipelined the code to **Nexus**.

**ENVIRONMENT:** AWS,Ansible,Json,Jenkins,Junit,Maven,Jfrog,Gradle,Nexus,EC2,VPC,RDS,MYSQL,Chef,Tomcat,Nginx,Apache Spark, Docker, Elk, Jira

**Title: DevOps Engineer**

**Location: kohl’s, Milwaukee, WI July 2018 – May 2019**

**Responsibilities:**

* Hands on experience on **Azure** VPN-Point to Site, Virtual networks, **Azure** Custom security, end security and firewall. Used **Azure** Express Route to set up a private connection to Microsoft cloud services such as a Microsoft **Azure**, Office 365, and Dynamic 365.
* Building and Installing Servers through **Azure** Resource Manager Templates or Azure Portal.
* Install and configure **RedHat** Enterprise **Linux Server**, **DHCP**, web (Apache **HTTP**), mail (**SMTP, POP3**), and file servers in Linux environment.
* Experience with **Linux** container and container clustering technologies like **Docker, Kubernetes and the Glister storage solution.**
* Used SMTP mail class of **.NET**for the users to send mail with suggestions, receive any alerts, receive confirmation notifications etc.
* Installation of **Oracle-8i** Server, Oracle Client Software on the application server and configuring the connectivity using JDBC drivers for the **DB**
* Developed **CI/CD** system with Jenkins on Google's **Kubernetes** container environment, utilizing **Kubernetes** and Jenkins for the runtime environment for the **CI/CD** system to build and test and deploy.
* Created reusable and tested infrastructure with **Terraform** modules and **Versioned** modules for **Staging, Testing** and **Production** environments in **Azure**
* Worked on parsing and editing XML documents by validating it to the schema using class libraries provided by **.NET.**
* Developed a **PowerShell**script which collected configuration data from the VMware environment to ensure conformity and stability.
* Created **RDD's** Extracting the data from **Azure** Blob Storage (Blobs, Files, Tables and Queues) and making transformations & actions.
* Knowledge support in administration of **MS** **Windows AD, MS** Exchange and **MS IIS servers**.
* Troubleshooting the connectivity from the Application to **DB**, maintenance of the **DB**'s in server
* Maintained the **Shell** scripts for the automation purposes.
* Deployed custom .net web application on IIS
* Created reusable and tested infrastructure with **q** modules and **Versioned** modules for **Staging, Testing** and **Production** environments in **Azure**.
* Clone projects in **Jenkins** for developers and generate builds and store it in **Sonatype**

**Nexus** repository.

* Utilized **Azure Power Shell** to automate backups of ephemeral data-stores to **Azure Storage (Blobs, Tables, Queues, Files**, **Azure Blob Storage** and create nightly **IAAS** and **PAAS** for mission critical production servers as backups.
* Proficiency in writing automation scripts using **Chef, Puppet, Shell, PowerShell** to support infrastructure as code and continuous deployment.
* Used **Octopus Deploy**to deploy releases from **Development**to **Test, Stage and Production.**
* CI/CD custom **Azure** DevOps Pipelines for **Build/Release** of Corporate (**Windows**) Applications & Web Portals, generating environment specific **IIS** & **MSI** artifacts with "web.config" & "app.config" transformations
* Worked with Engineers on providing the configuration details of the **DEV** environments and assisting in Creating **CHEF** recipes for Proof of Concept.
* Created a resource group, storage account, and Azure Files in cloud Shell using **PowerShell**. Created Power Shell scripts to automate the **Azure** Cloud system creation including end-to-end infrastructure, **VMs**, storage, firewall rules.
* Ownership for **Azure** SQL server DB deployment & managed the continues integration & continues deployment.
* End to End Deployment Automation using **PowerShell** scripts and Octopus Deploy Tool for achieving **CI/CD.**
* Involved in setting up **Puppet Master/Client** to automate installation and configuration across the environment.
* Used **Chef** for server provisioning and infrastructure automation in **Azure**.
* Configure network protocols such as **DNS, DHCP** and **SMTP** and troubleshoot network issues related to **TCP/IP** protocol providing support for users in solving their problems.
* A**GILE** (Scrum, XP approach) methodology including, test-driven and pair-programming concept.
* Created a **Jenkins** pipeline to drive all **Microservices** builds out to **Docker Hub** and then Deployedusing**Octopus Deploy** to **Kubernetes**, **created pods** and configured **Kubernetes** Replication controllers and integrated **Docker container** orchestration framework using **Kubernetes** by **Creating Pods**, **ConfigMaps**.
* Designed, built, supported and maintained Splunk infrastructure in a highly available configuration
* Good experience in **RDBMS** (**Oracle, SQL Server, MySQL, Informi**x) development including **SQL, PL/SQL** programs and stored procedures.
* **Azure** architecture, development and management
* Develop build automation via **ARM** Templates and **Powershell**

**Environment:** Docker, Chef, Puppet, octopus,SQL, PL/SQL, SMTP, Shell, Docker, Jenkins, Azure, Python, Maven, PowerShell, Nexus

**Title: Build and Release DevOps Engineer**

**Location: Liberty Mutual Group Seattle, WA March 2017-June 2018**

**Responsibilities:**

* Experience in working on source control tools like **SVN, CVS,** Perforce, **GitHub.**
* Managed **SVN** repositories for branching, merging, and tagging.
* Strong knowledge on source controller concepts like Branches, Merges and Tags
* Used **ANT** and **Gradle** as a build tools on java projects for the development of build artifacts on the source code
* Experience on application servers like **WebLogic, WebSphere, JBoss** and web servers like **tomcat.**
* **Maven, Ant** and **Gradle & Ruby** Scripting (**json**) to create build for installation of various middleware through **Jenkins**
* Experience in deploying **JAVA** projects and automating builds using **MAVEN/ANT** and **JENKINS**
* Proficient in using version control tool like **Team Foundation Server (TFS)** and Visual Source Safe **(VSS), SVN.**
* Supported installation of Oracle database (**RAC**) on Linux servers associated with **DBAs.**
* Perform data migration across multiple Solaris and **RedHat servers**
* Implemented a Continuous Delivery (**CD**) pipeline with **Docker, Jenkins and GitHub, Bit bucket and AWS**
* Used **BOTO** and Fabric for launching and deploying instances in AWS.
* Experience with monitoring and management tools like **NAGIOS, SPLUNK.**
* Strong skills in managing **Red Hat** Linux servers, Virtualization, and system security.
* Extra ability to approach in virtualization technologies like **OVM, VMWare, Xen**..
* Experience in using bug-tracking systems like **JIRA, HP** Quality Center and **ALM.**
* Capability in utilizing mechanized from scripts like **maven, Jfrog, Jenkins, Ansible, /Puppet.**
* Experience on application servers like **WebLogic, WebSphere, JBoss** and web servers like **tomcat**.
* Good knowledge in using **JavaScript** frameworks like **AngularJS**
* Experience in deploying application servers like **Tomcat** and **JBOSS**

**Environment:**SVN,Git,Github,Maven,Jfrog,Jenkins,puppet,Docker,mware,Tomcat,Ruby,Redhat, TCP/IP, HTTPS, JSON, Nagios, JAVA , .NET, Tomcat, JavaScript, IAM.

**Title: Build and Release Engineer**

**Location:** AGL Resources,IL **Jan 2016 – Feb 2017**

**Responsibilities:**

* installing **Red hat** Linux using Kick start and applying security polices for hardening the server based on company policy.
* Configured AWS **IAM** and Security Group in Public and Private Subnets in **VPC**.
* Performing host-based migrations on different operating systems like **Linux/solaris/AIX**.
* Involved in **Bamboo** server Capacity planning and wrote Watchdog scripts for Bamboo server restarts and Expect scripts for **Bamboo** remote agents.
* Install, implement, and configure **DHCP, DNS, LDAP, SAMBA** and **NFS** services in Linux
* Preform Troubleshooting. Such as **CPU, I/O**, memory, and network.
* Continuous Integration implemented and promoted use of **Bamboo** within the developer community.
* Extensively experienced in using Build Automation tools like **ANT, Maven, Gradle** and working knowledge on other builds Like MS Build Make file.
* Coordinated with application team in installation, configuration and troubleshoot issues with **JBoss** servers
* Building servers on **ESXI** using network boot and performing cold & hot migration on **VMware**
* integration & implementation of various services, **LDAP**, **Samba, NFS, Bind, Apache**, and other core technologies.
* Worked on configuring the Apache **Tomcat** for Java applications deployment.
* Worked on virtualized environment based on **VMware vSphere** to create large Farms of **clusters**
* Extensively worked on continuous integration tool like, Team city, **Jenkins,** CA Harvest and **Bamboo** for end-to-end automation of various build and deployments.
* Setting up the **SVN** and **GIT** repos for **Jenkins** build jobs
* Coordinated with application team in installation, configuration and troubleshoot issues with **JBoss** servers
* Maintaining and installing Red Hat Package Management (**RPM**) and **YUM.**
* Installation and configuration of database systems e.g. **MySQL**, **Oracle**, and **PHP**
* integration & implementation of various services, **LDAP**, Samba, **NFS**, **Bind, Apache**, and other core technologies.
* Worked on customization of existing **Python** scripts of some of the internal applications.

**Environment:** Python, Shell, Maven, Jenkins, Bamboo, SAMBA, DHCP, DNs

**Title: Linux Administrator**

**Location: Lanco Global Systems Hyderabad, India Sep 2012- Dec 2015**

**Responsibilities:**

* Analyze, log, and track complex software and hardware matters of significance pertaining to networking connectivity issues, printer, server, and application to meet business needs.
* Building of **Virtual Machine (VM's).**
* **RPM and YUM** package installations, patch and other server management
* Building servers with **jumpstart / kickstart, CD** on timely basis, along with corporate wide requirements.
* Provide Linux (**Redhat**) and Unix support for Jeppesen building out **Redhat** and **HPVM** servers
* Automated tasks using **bash**, **kernal** **shell** scripts.
* Installed and maintained OpenStack on **KVM** for cloud applications.
* Installed and Configure **DNS**, **Websphere, DB2** Database and **Tivoli** storage manager.
* Experience in **VMWARE ESXi 5/6** and **vSphere** and managed VM resource upgrades, Cold migration of **VM** from once **vCente**r to other.
* Experience managing various file systems using **LVM** and **SVM** and configured file systems through network using **NFS, NAS, SAN** methodologies and installed **RAID** devices.
* Handled and documented Cold Migration issues and **IP, SAN**, Network bandwidth and **VLAN** constraints **chef.**
* Performed the administration of the **Domain Name Server** and configuration of the Database Files.
* Coordinate with the **Development, Database Administration, QA,** and **IT Operations teams** to ensure there are no resource conflicts.
* Designed and configured large **AIX systems (p6, p5),** Building **VIO** Servers **LPRAS**, **VIO** Client LPARS installed VIOS 2.3, AIX6.1/5.3 using **HMC V6** and installed/backup VIOS, BOS using **NIM.**
* Extensive use of **LVM**, creating **Volume Groups**, Logical volumes, and disk mirroring. Performance Management & Tuning of **Red Hat** Linux 6/7 UNIX Kernel.
* Experience in Databases, **Clustering**, **Firewalls** and cross-platform tools like **SAMBA**.

**Environment**: IPA, Kvm, DNS, DB2, VSphere, LVM, and SVM, NFS, NAS, SAN, , TLS, TSM, VPC

**Education:**

**Master’s in Computer Information systems, Henniker, New Hamshire,USA.**

**Bachelor of Computer Science Engineering, Hyderabad, INDIA.**