**Bharat Kumar Sharma   
Sr. Cloud/DevOps Engineer**

**Sharmabharat041790@gmail.com| Ph: +1 405 300 0373**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**PROFESSIONAL SUMMARY:**

* Overall, **10+ years** of experience working in **Information Technology Environment, Change/Configuration, Build and Release Management**. Actively hosted and participated in Change Control, Agile, Production readiness and application release meetings throughout the Application life cycle Management (**ALM**)process.
* Experience in several AWS Services including **EC2, VPC, IAM, S3, RDS, ELB, Route 53, CloudWatch, Cloud Formation Templates, CloudFront, CloudTrail**, **Guard Duty, Macie, GCP, AWS CDK, AWS Config, ALB/NLB Load Balancers, AWS inspector** and administering them using AWS Console and AWS Command-line Interface.
* Good experience on version control systems like **Subversion, GIT** and Source code management client tools like **GIT Bash, GIT Hub, GIT GUI**.
* Experience with **Linux/UNIX** environment with shell scripting for Build & Release automation and writing Shell and Python scripts to automate the deployments.
* Extensive experience with Continuous Integration Tools (**Jenkins, Bamboo, TeamCity**) and Continuous Deployment practices.
* Hands on experience in Terraform for building, changing, and versioning of Infrastructure and wrote Templates for AWS infrastructure as a code using Terraform to build staging and production environments.
* Deployed application which is containerized using **Docker** onto a **Kubernetes** cluster which is managed by Amazon Elastic Container Service for Kubernetes (**EKS**).
* Building/Maintaining Docker container clusters managed by **Kubernetes Linux, Bash, GIT, Docker, AWS Utilized** **Kubernetes and Docker** for the runtime environment of the **CI/CD system** to build, test deploy.
* Managed security groups on AWS, focusing on **high-availability, fault-tolerance**, and auto scaling using **Terraform templates**. Along with Continuous Integration and **Continuous Deployment** with **AWS Lambda and** AWS code pipeline.
* Excelled in developing CD pipeline with **Jenkins, Ant, Maven, Docker, GIT Hub and AWS AMI’s.**
* Wrote **Shell**, **Bash**, **python**, **Perl,** and **Ruby** scripts for day-to-day administrative tasks and for managing users.
* Hands-on experience on development of utilities using **Python, Ruby scripting** to automate processes and performed various day-to-day administration tasks.
* Experience in Deploying and monitoring **Microservices**on various platforms like **AWS ECS,** **Kubernetes,** **OpenShift.** Developed **Kubernetes**Pod definitions, Deployments and used Helm Charts to version control complete deployment strategies.
* Experience in configuration management tools such as **Puppe**t and **Ansible**, proficient in writing **Ansible** roles from scratch.
* Experience on Cloud technologies like **AWS, Azure, and Google Cloud Platform**.
* Implement, provisioned, and administered AWS services like **EC2, S3, AMI, IAM, EBS, ELB, VPC, Route 53, CloudWatch, Cloud Front, Cloud Formation templates** and troubleshooting on various **Amazon Images**.
* Integrate and implement a complete cloud services framework (**IaaS, PaaS, and SaaS**) and cloud deployment model (private, public, and hybrid).
* Develop proactive monitoring tools using **Nagios, Data Dog, AppDynamics** to create dashboards, views, and queries and alerts that provide awareness into critical business processes.
* Experience in Virtualization technologies like **RHEV, VMware, Vagrant.**
* Experience with metrics/monitoring tool like **EFK** stack **(Elasticsearch, Fluentd, Kibana)** for **API** Dashboard.
* Expertise in Installation, Configuration Data Base Servers like **MySQL, MariaDB, PostgreSQL, MongoDB, Oracle DB** on various Linux Distributions.
* Maintained Artifacts in binary repositories using **J Frog** **Artifactory** and pushed new Artifacts by configuring the Jenkins project using **Jenkins Artifactory Plugin.**
* Used **Ansible** to manage Web applications, Environment’s configuration Files, Users, Mount points and Packages.
* Handled on-call rotation to support 24\*7 support for client's infrastructure and applications alerted by **PagerDuty**.
* Good understanding of **Agile** Methodologies (Scrum/Sprint/Iterations) in **Agile SDLC**.

**TECHNICAL SKILLS:**

* Operating Systems: Windows, RedHat, Centos and Ubuntu.
* Source control Tools Git, Git Hub, GitLab.
* Build Tools: ANT, MAVEN, and Gradle.
* CI Tools: Jenkins, Cloud Bees Jenkins, Bamboo and Team city.
* Configuration Management Tools: Chef, Ansible, Puppet.
* IAC: AWS Cloud formation, Terraform.
* Scripting and Languages: Java, C#, C, C++, .Net, Perl, Power shell, SQL, Java/J2EE, Ruby, Python, Shell, Bash.
* Tracking Tools: Grafana, Prometheus, Atlassian JIRA, BMC Remedy, ADO
* Web Servers: Web Sphere, Apache Tomcat and JBOSS.
* Databases: Oracle, SQL SERVER, MY SQL, Mongo DB.
* Containerization Tools: ECS, EKS, Docker Swarm, Kubernetes, OpenShift.
* Cloud Environment: AWS, Azure and GCP.
* Virtualization Tools: Virtual Box, RHEV and VMware.
* Monitoring Tools: Nagios, AppDynamics, Datadog, Splunk, New Relic
* Network Protocols: TCP/DHCP/IP, DNS, NFS, SAMBA, SSH, SFTP, SNMP

**PROFESSIONAL EXPERIENCE**

**Southern Company, NJ. July 2021 to Till Date**

Role: Sr Cloud DevOps Engineer

**Responsibilities:**

* Created, tested, and deployed an End-to-End CI/CD pipeline for various applications using Jenkins as the main Integration server for Dev, QA, Staging, UAT and Prod Environments with Agile methodology.
* Monitored servers, applications by using shell/python scripts and used Splunk, Nagios to resolve infrastructure problems and worked on Nagios Event handlers to automatically restart failed services and applications.
* Configured alerts for performance metrics of the Production servers and applications hosted on OpenShift Container Platform.
* Worked on Docker, GCP and Kubernetes on cloud providers, from helping developers build and containerize their application (CI/CD) to deploy.
* Created the automated build and deployment process for application, re-engineering setup for better user experience, and leading up to building a continuous integration system for all services.
* Gitlab Migration: Worked on migration from Jenkins and bitbucket to GitLab CI/CD which includes Migrating existing applications, building new servers, deploying applications, setting up automation in new environment, creating CI/CD pipeline for Dev and Test environment.
* AWS SAM CI/CD pipeline: Designed and Implemented Serverless applications using GitHub actions and code pipeline.
* Developed automation scripting in Python (core) using Puppet to deploy and manage java applications across Linux servers
* Wrote Python scripts for pushing data from MySQL database and created, maintained the python deployment scripts for Tomcat web application server.
* Provisioned and administered AWS services like EC2, S3, AMI, IAM, EBS, ELB, VPC, Route S3, GCP, CloudWatch, Cloud Front, Cloud Formation templates.

**Abbott, IL. Sept 2019 – June 2021**

**Role: Sr Cloud DevOps Engineer**

**Responsibilities:**

* Worked on migration from on premise to AWS which includes Migrating existing applications, building new servers, deploying applications, setting up automation in new environment, creating CI/CD pipeline for Dev and Test environment.
* Utilized CloudWatch to monitor resources such as EC2, CPU memory, Amazon RDS DB services, Dynamo DB, tables, EBS volumes; To set alarms for notification or automated actions and to monitor logs for a better understanding and operation of the system.
* Installed, administrate, troubleshoot, and resolve issues in OpenShift Container Platform on AWS and On-Prem.
* Integrating RedHat OpenShift Satellite. Administrating the RedHat OpenShift satellite for package management and subscription management.
* Deployed application which is containerized using Docker onto a Kubernetes cluster which is managed by Amazon Elastic Container Service for Kubernetes (EKS). Configured ‘Kubectl’ to interact with Kubernetes infrastructure and used AWS Cloud Formation Templates (CFT) to launch a cluster of worker nodes on Amazon EC2 instances.
* Created Dev/Test/Prod environments to run applications on AWS by provisioning Kubernetes clusters on EC2 instances using Docker.
* Configured and managed **Elastic Load** **Balancer** (ELB)with Auto scaling groupsfor high availability and fault tolerance.
* Utilized **Route53**to route traffic to different environments based on the routing policy defined.
* Wrote YAML scripts for AWS code deploy to automate deployment process.
* Build Continuous Integration environment and Continuous Delivery using Jenkins Build for Dot net application with Continuous Integration stack consisting of Gitlab, Jenkins CI-CD, Nexus and OpenShift Enterprise.
* Perform security checks on containers and images using Twist lock.
* Installed and Configured Trident on OpenShift Container Platform to orchestrate storage on NetApp backends.
* Perform system analysis, troubleshooting and performance tuning of operating systems.
* AWS Cloud Administration, EC2 Instances creation, setting up AWS VPC, launching AWS EC2 instances different kind of private and public subnets based on the requirements for each of the applications.
* Worked on implementing Data warehouse solutions in AWS Redshift, worked on various projects to migrate data from one database to AWS Redshift, RDS, ELB, EMR, Dynamo DB and S3.
* Hands-on experience in Azure Cloud Services (PaaS & IaaS), Storage, Web Apps, Active Directory, Azure Container Service, VPN Gateway, Content Delivery Management, Traffic Manager, Azure Monitoring, OMS, Key Vault, Visual Studio Online (VSO) and SQL Azure.
* Worked in Azure DevOps on CI/CD with Azure Repos, Container Registry, MS Build, Maven, Sonar cloud, Kubernetes Service (AKS) and ARO.
* Experience in creating **Docker** containers leveraging existing Linux Containers and AMI's in addition to creating **Docker** containers from scratch.
* Experience in installation and customization of **Splunk** using **Splunk** Power Design
* Extensively worked on **Hudson**, **Jenkins,** and Team City for continuous integration and for End-to-End automation for all build and deployments.
* **Kerberos**: Design and deployment of Kerberos delegation, constrained delegation, troubleshooting Kerberos authentication failures.
* Built and Deployed **Java** **script** to a web application server in an **Agile** continuous integration environment and automated the whole process.
* Responsible for Deployment Automation of all Microservices to pull image from Private Nexus registry and deploy to OpenShift Cluster.
* Setup Datadog monitoring across different servers and AWS services.
* Configure alerts for performance metrics of the Production servers and applications hosted on OpenShift Container Platform.
* Harden and patch OpenShift Clusters using OpenShift-Ansible scripts from Ansible Tower in Pre-Production and Production and virtual servers.
* Configure RedHat Satellite and repository servers to perform RPM installations across the environment.
* Wrote scripts in SHELL and Python to automate Cron jobs and system maintenance and developed the ruby
* scripts to automate system deployment to scale infrastructure.
* Assisted creating MVP on using Ansible Tower and Hashi Corp Vault to leverage Git Ops model.
* Participation in POC, demos and events assisting customers and solving technical questions for clients.

**Spectrum, MI. June 2016 – Aug 2019**

**Role: Sr Cloud Engineer**

**Responsibilities:**

* Working for Software Configuration Manager Platform team responsible for specialization areas related to Terraform for Cloud Automation.
* Hands on experience with AWS Cloud services like EKS, EC2, VPC, S3, IAM, Route 53 and Lambda.
* Designed and implemented by configuring Topics in new Kafka cluster in all environments.
* Experience leading solutions development and complex technical deployments across cross-functional teams.
* Created multi branch pipelines and automated build and deploys using Jenkins and ansible.
* Automated creation of immutable infrastructure (EC2, VPC, ELB, Auto Scaling) using terraform.
* Writing shell scripts for Automated Back- ups and Cron Jobs using bash.
* Created certificates using AWS certificate manager and applied them across ELBs and EC2s.
* Set up both classic and application load balancers as per the requirements of the application teams.
* Experience in load balancing and monitoring with **Nagios** and **Splunk**.
* Experience in creating **Docker** containers leveraging existing Linux Containers and AMI's in addition to creating **Docker** containers from scratch.
* Experience in installation and customization of **Splunk** using **Splunk** Power Design
* Used shared libraries across multiple Jenkins files to create re-usable codes.
* Integrated build/deploy pipelines with emails/Slack/MS-Teams so that appropriate teams are notified on status.
* Performed all Linux operating system, disk management and patch management configurations, on Linux instances in **AWS**.
* Kerberos optimization: Working with network team, Integrate Cisco, and Riverbed devices in AD for Kerberos traffic optimization to improve upon low latency. SharePoint
* Implemented rapid-provisioning and life-cycle management for Ubuntu Linux using Amazon **EC2** and custom **Ruby**/**Bash** Scripts.
* Automated server deployment with Kickstart and **Chef/Puppet**.
* Promoted builds across various environments such as sandbox, dev, qa, sat, prod and DR.
* Maintained and managed Jenkins in terms of plugin management, user access, configuration management.
* Integrated Jenkins with AWS plugin so that the Jenkins slaves are online only when called, resulting in cost savings to the customer.
* Created Database on Influx DB also worked on Interface, created for Kafka also checked the measurements on Databases.
* Installed Kafka manager for consumer lags and for monitoring Kafka Metrics also this has been used for adding topics, Partitions etc.
* Successfully Generated consumer group lags from Kafka using their API
* Created ansible roles and playbooks to provision infrastructure resources in non-prod and prod environments.

**GAP Inc, CA. April 2015 – May 2016**

**Role: Cloud DevOps Engineer**

**Responsibilities:**

* Dockerized applications and deployed on AWS ECS.
* Experienced with deployment automation of all the microservices to pull the image from the private Docker Registry and deploy to Docker Swarm Cluster using Ansible.
* Assisted in configuring EFK (Elastic Search, Fluentd, Kibana) and maintaining EFK logs.
* Created S3 Buckets in AWS and stored files. Enabled Versioning and security for files stored.
* Used IAM to assign roles, to create and manage AWS users, groups, and permissions to use AWS resources.
* Worked on GIT (GIT Hub) repositories as Distributed Version Control System.
* Extensively worked on integrating GIT into the Continuous Integration (CI) environment along with Jenkins configured the services using modern DevOps tools.
* Defined AWS Security services as virtual firewalls to control the traffic on EC2 instances for a multitude of applications utilizing the Amazon Web Services focusing on high-availability, Fault Tolerance, and auto-scaling.
* Build servers using **AWS** Launching **EC2**, creating security groups, load balancers in the defined virtual private connection.
* Working with Public Cloud Platform like Amazon Web Services for compute **AWS** **EC2** and Storage **S3**.
* Deploy, monitor, and maintain Amazon **AWS** cloud infrastructure consisting of multiple **EC2** nodes and VMWare Vm's as required in the environment.
* Implemented multi-tier application provisioning in OpenStack cloud, integrating it with **Puppet/Chef**. Adding vSphere to nova compute nodes and manage and troubleshoot the Nova Compute and Controller Services.
* Deployed **J2EE** applications to Application servers in an Agile continuous integration environment and automated the whole process. Build scripts using **ANT** and **MAVEN** build tools in Jenkins, Sonar to move from one environment to other environments.
* Extensive experience in using Build Automation scripting like Apache **ANT, NANT,** and Maven.
* Installed and configured an automated tool **Puppet/Chef** that included the installation and configuration of the **Puppet** master, agent nodes and an admin control workstation.
* Experience in Installing, configuring, and maintaining Apache/tomcat, samba & send mail, and **JBoss** Application Servers.
* Configured the LUNs assigned by the storage administrators, and managed Volumes using Logical Volume Manager (LVM) on Linux.
* Create **Jenkins** pipeline jobs for **Puppet** release process for module deployment, using Kanban agile methodology for **Puppet** development.
* Created alarms, monitored, and collected log files on AWS resources using CloudWatch on EC2 instance which generates an email and text notification using Simple Notification Service.
* Designed Terraform templates to create custom-sized VPC, subnets, NAT to ensure successful deployment of Web applications and database templates and migration from traditional to cloud environment.
* Involved in using Terraform to migrate legacy and monolithic systems to Amazon Web Services.
* Implemented AWS Code Pipeline and Created Cloud formation JSON templates in Terraform for IaaC.
* Used Docker to containerize Microservices in the cloud and managed clusters using Docker Swarm and Kubernetes. Developed Private cloud system solution on CentOS server using Kubernetes.
* Built end to end CI/CD Pipelines in Jenkins to retrieve code, compile applications, perform tests and push build artifacts to Nexus Artifactory and deploy them on the web servers.
* Automated the build and release process by using shell scripting, Maven and Jenkins in non-production environments and managed the team’s source repository through SVN.
* Monitored the server and network infrastructure using **Nagios**.
* Documented architecture on prem and cloud infrastructure design.
* Worked on creation of custom Docker container images, tagging, and pushing the images.

**Global Techno IT Sol, Bangalore, India. Jan 2013 - Nov 2014**

**Role: Build and Release Engineer**

**Responsibilities:**

* Created the **automated build** and **deployment process** for application, re-engineering setup for better user experience, and leading up to building a continuous integration system for all our products.
* Created, tested, and deployed an End-to-End **CI/CD pipeline** for various applications using **Jenkins**as the main Integration server for **Dev, QA, Staging, UAT**and Prod Environments with **Agile** methodology.
* Worked as administrator on **web and application servers** like **WebLogic, Tomcat, Apache, and Nginx**.
* Regular **Build jobs** are initiated using the Continuous Integration tool with **Jenkins**.
* Performed build, deployment & validation of the code into different development environments using **ANT Hill Pro.**Creating user level of access for related **GIT Hub** project directories to the code changes.
* Automated **JAVA** builds using **TFS**by installing Team Foundation Build Extensions. Installed Team Explorer Everywhere plugin for Eclipse users to be able to connect to **TFS server.**
* Implemented a CD pipeline involving **GIT -** **Jenkins** - **Ansible** to complete the Automation from commit to Deployment.
* Setting up **Jenkins master**, adding the necessary plugins and adding more slaves to support scalability and agility.
* Installed packages on remote **Agent less nodes** through **Ansible playbooks** with **Ansible** roles.
* Used file modules in **Ansible playbooks** to copy / remove / modify the files on agent fewer remote servers from **Ansible control server.**
* Worked on playbooks for **Ansible** in **YAML** scripting. Downloaded and managed **Ansible** roles from **Ansible Galaxy** to automate the infrastructure.
* Written **Python scripts** to apply the Integration label to all the files which needs manual labelling of files.
* Owner of **Jenkins, GIT Hub** **Artifactory** and all internal build systems for the core development team on an enterprise-level Java-based cloud orchestration/automation tool.
* Utilized **Kubernetes** and **Docker** for the runtime environment of the **CI/CD** system to build, test deploy.
* Virtualized the servers using the **Docke**r for the test environments and dev-environment needs and verified those environments in **Docker** Containers for Sanity tests before upgrading to production environment.
* Worked on creating **Docker** containers leveraging existing **Linux Containers** and **AMI's** in addition to creating **Docker containers** from **scratch.**
* Created the **Docker file** and built various containers using **Docker engine** and **Docker Machine** environments and set up the automated build on **Docker HUB.**
* Implemented new **JIRA** workflows for the **QA** teams and worked on Splitting **JIRA** server's configuration. Managed **JIRA** users and created workflows, issue types, fields in production.
* Gathered all the **stakeholder approvals**, necessary signoffs while acting as a release manager for two development teams. Installed and configured the **DHCP server for giving IP** leases to the production servers.
* Managed RedHat Linux user accounts, directories, groups, and file permissions and Installed packages using **rpm and yum**.

**EDUCATION DETAILS:**

**Bachelor in commerce JG College 2011**

**CFA 2012 from Tripura University**

**MBA 2012 from Tripura University**