**CURRICULUM VITAE**

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1. **Career Objective:**

To be a part of an organization where I can fully utilize my skills and make a significant contribution to the success of the company and build my professional career.

1. **Professional Summary:**

An outstanding, self - motivated professional with around 5+ years of experience in IT industry with major focus on Linux/Unix administration and Software Configuration Management , Container technology and DevOps Process

Container development, orchestration, management and administration.

Advanced container orchestration, cluster implementation, administration and automation

Integration of clusters with monitoring and logging solutions

Performs necessary systems maintenance in accordance with RedHat & Containers best practices and Company change management policies.

Troubleshooting issues with Container solution tools, cluster.

Implemented AWS Cloud platform and its features which includes EC2, VPC, EBS, AMI, SNS, Autos calling, IAM, S3, and R53.

Worked on cloud-based servers like Amazon web servers

Understanding of the principles and best practices of Software Configuration Management (SCM) processes, which include compiling, packaging, deploying and Application configurations.

Worked with Version Control Systems GIT, Bit Bucket.

Worked with automation tools like Jenkins to implement the End-to-End Automation.

Server provisioning, automation (Ansible), maintenance and performance tuning

Hands on experience in installing and administrating CI tools like Jenkins,

Managed Docker orchestration and Docker containerization using Kubernetes.

Used Kubernetes to orchestrate the deployment, scaling and management of Docker Containers.

Good Knowledge in Shell, Ansible yml Scripting

Experience in and demonstrated understanding of source control management concepts such as branching, merging, labelling and integration.

Experience in maintaining and executing build scripts to automate development and production builds.

Experience in configuration and Management toll like Ansible to automate the cloud infrastructure

Familiar with major PaaS platforms such as, OpenShift,

Good interaction with developers, managers, and team members to coordinated job tasks and strong commitment to work.

**Education Details:**

* Batchelor of Computer Science and Engineering (CSE) from Jawaharlal Nehru Technological University Anantapur (Studied in Mekapati Rajamohana Reddy Engg colleage, Hyderabad) from 2007-2011
* 12th (Mpc) from Board of intermediate Education (studied in AMG Jr college-AP) from 2004-2006.
* SSC(10th) from Board of Secondary Education (Studied in Bishop Bali High School, Piduguralla-AP) from 2003-2004

**Work Experience:**

* Worked for Eduquity Carrier Technologies Pvt Ltd as Network Administrator in Hyderabad from Sep 2015 to Nov 2018.
* Working for Infosys Ltd as Technology Analyst in Hyderabad from Nov 2018 to till date

**TECHNICAL SKILLS:**

Cloud Service: AWS

Configuration Management tools: Ansible.

Programming: Shell, Ansible

OS Platforms: Linux (Redhat) v6/7, Ubuntu

SCM/Version Control Tools: GIT, BitBucket

CI Tools: Jenkins

Ticketing/Bug Tracking: ServiceNow.

Monitoring tools: Elastic Search Log stash Kibana

Container & Orchestration Technologies: Docker, Kubernetes and Open shift

**Roles & Responsibilities:**

Implemented a continuous build-test-deployment (CI/CD) system with multiple component pipelines using Jenkins to support weekly releases and out-of-cycle releases based on business needs

Kubernetes **cluster security** was improved by usage of pod security policies, network policies, secrets, service account, roles and role bindings.

Have worked in the **rightsizing of Kubernetes clusters** based on the cluster requirements of applications.

Involved in the **plan and design** of the setup of **EKS clusters** for multiple teams/applications including resource management, networking, auto scaling properties and all other services of Kubernetes.

Have managed the **persistent volumes** of Kubernetes clusters using volume mounts, persistent volume claims, hostpath, etc.

Have implemented persistent volumes through AWS **EBS, EFS**, (OpenShift), NFS.

Kubernetes persistent volume **dynamic provisioning using storage classes** in clusters for EBS, EFS in AWS.

Facilitated dynamic **configurations** of container pods using Kubernetes concepts of **ConfigMaps**, **Lifecycle postStart** **hook** scripts in deployments

Managed **CNI plugin** like Weave networks, flannel, and calico during k8s cluster setup

Configured k8s clusters with proper **node specifications** based on **resource and capacity**, proper **labelling** thereby setting **limits** which will have better performance.

**Troubleshooted** issues with k8s clusters with respect to both control plane components including etcd and worker nodes.

Provided **isolation** between applications and streams using **k8s namespaces, rbac roles, and service accounts**.

Developed and managed workloads using different controllers like **Deployments, ReplicaSet, DaemonSet, StatefulSet, Job**, etc.

Created K8S **Service to expose the pods** using NodePort, ClusterIP and Loadbalancer, both HTTP and secured TLS applications.

Integrated the Service Loadbalancers with **AWS ELBs**.

Created k8s **Ingresss** for a multiple backend configuration application and by using Ingress controller nginx.

Managed Kubernetes resources with **resource quotas requests and limits** thereby maintaining consistent performance of the cluster and application.

Managed multiple k8s clusters with **kubeconfig file with user and context** configuration.

Usage of **helm charts** to deploy Kubernetes application pods.

Implemented solutions to accommodate client recommendations for **pod scheduling** by usage of **taints and tolerations** of nodes, **Node Affinity** and **Anti-affinity** and **pod affinity** rules.

Integrated solutions of Monitoring in k8s clusters using **Prometheus** and **Grafana** dashboard visualization. Also used **ELK (Elasticsearch, Logstash, and Kibana)** stack for monitoring and logging.

Lead transition from manual configuration and deployment to ‘infrastructure as code’ using **Ansible**. Including design and implementation of Playbooks and roles.

Written Ansible playbooks and roles to automate **ELK Stack** deployments with Ubuntu and Redhat servers

Developed **Kubernetes manifests/yaml files** for application build onto Kubernetes clusters.

Written **yaml files** for pods, deployments, stateful sets, services, secrets, configmaps, daemon sets, replica sets, endpoints, etc.

Automated application checks using **shell script**, Automation of internal application process using shell script reducing the manual efforts.

Written Ansible playbooks to automate file beat and metric beat to analyse and aggregate the logs in elastic search

Written Ansible playbooks to automate & integration between Kubernetes and Elastic search

Written Ansible playbooks to automate network infrastructure like Cisco devices

Built and managed a large deployment of RedHat Linux instances systems with Ansible Automation and

Implemented automated local user provisioning VMs created in AWS cloud through Playbooks.

Experienced Cloud and DevOps engineer in Automating, Configuring and deploying instances on AWS Cloud environment.

Worked on Amazon AWS EC2 cloud services for installing, configuring and troubleshooting on various Amazon images like Amazon Linux AMI, Red hat, Ubuntu.]

Used Jenkins pipelines to drive all micro services builds out to the Docker registry and then deployed to Kubernetes, Created Pods and managed using Kubernetes

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.

Involved in development of test environment on Docker containers and configuring the Docker containers using Kubernetes.

Writing & Creating yml manifest files for **PV, PVC, Deployments, Statefull sets, Daemon** sets objects

Creating users in kubernetes cluster and assign access permissions to projects/Namespaces

Writing & Creating role, cluster role, role binding and cluster role binding

Providing object limitations to namespaces/projects using Resource quota and Resource limits

Worked on deployment automation of all the micro services to pull image from the private Docker registry and deploy to Kubernetes cluster using Ansible.

Building/Maintaining Docker container clusters managed by Kubernetes Linux, Bash, GIT, Docker.

Worked with Open Shift platform in managing Docker containers and Kubernetes Clusters.

Debugging and resolving Pod issues like **Crash loop-back** of errors, **image loopback** of error, **pending** state issues

Created Kubernetes deployment, statefulsets, Network policy etc.

Worked on infrastructure with Docker containerization and maintained Docker Images and containers.

Provision virtual servers in Amazon EC2 using Ansible automation

Utilized Kubernetes for the runtime environment of the CI/CD system to build, test deploy.

Implemented AWS solutions using EC2, S3, VPC, Elastic Load Balancer, Auto scaling groups.

Implementing a Continuous Delivery framework using Jenkins, Ansible, Maven & Nexus in Linux environment

Managed Ansible playbooks/roles to automate system operations.

Integration of Maven/Nexus, Jenkins, Bit Bucket, Ansible, Kubernetes/Open shift

Configured Elastic Load Balancers (ELB) with EC2 Autos calling groups

Worked on troubleshooting issues with Elastic search cluster health status (Unassigned shards).

Responsible for product deployments into QA, STAGE and PROD environments.

Procuring and configuring the server as per the needs of the release and the application.

Coordinate with Release Management regarding appropriate system releases among other development platforms

Environment: Maven, Jenkins, GIT, Linux, Shell scripting, Ansible, AWS, Docker, Open shift, Kubernetes.

**Declaration:**

I hear by declare that the above furnished information is true to the best of my knowledge and belief.

Place: Hyderabad Koteswara Rao.V