Mohammed Uzair Mohiuddin

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#### Professional Summary

To design highly scalable and fault-tolerant systems for an esteemed organization, which would be rewarding in terms of learning experience and contribute to organizational and personal growth.

#### EXPERIENCE

#### WALTLabs.io

Cloud Engineer

Apr. 2022 - Present

- o Implemented HashiCorp Vault in a kubernetes cluster using Terraform for a client to centralize secret management.
- Injected secrets in Kubernetes pods using vault annotations and helm templates.
- Created common/library helm charts to keep code DRY.
- Created alerts for Lets Encrypt deployments.
- Installed and Configured Linkerd via Helm based deployment.
- Applied Pod Disruption Budget values for K8s resources.
- o Upgraded Traefik charts to v10 without downtime and Enabled Datadog tracing.

#### BETSOL

Associate Site Reliability Engineer

Jan. 2021 - Jan. 2022

- Automated the creation of AKS clusters using Terraform Templates.
- o Designed and implemented an Azure Web Application Gateway to perform path-based routing based on the content present in the HTTP request headers.
- Setup Cloudflare DNS zones via Terraform and was actively involved in performing CURD operations for DNS A records, Page rules and SSL certificates.
- Automated the creation of an Azure Compute Image with the help of Packer, Jenkins, and Nexus.
- Created Ansible roles to call web services which configured the Virtual Machines on First Boot.
- Designed and implemented the networking model of the project including partitioning the VNETs into component-based subnets, implementing VNET peering across regions to facilitate communication across the different entities of the solution.
- Worked on Terraform Cloud in order to setup Infra on Azure such as VNETs, Subnets, VMSS, KeyVaults and Created a CI/CD Pipeline for the same via Jenkins.
- o Observability as Code DataDog Alerts creation using Terraform to monitor the health of AKS nodes, Container restarts etc.
- Was involved in making hot fixes, Provided support in the roll-out and deployment of new application features to facilitate iterative development.

## KodeKloud

DevOps Engineer Nautilus, xFusionCorp

Jan.2020 - Dec.2020

Worked as a System administrator and DevOps Engineer to develop a platform "KodeKloud Engineer" on their website named "kodekloud".

#### Projects

## Avaya Proactive Outreach Manager - Component of CCaaS

Packer, Jenkins, Ansible, Terraform, Azure

- The goal of this project was to migrate an application which was hosted on-prem to Microsoft Azure.
- o Since the application was a monolith, The decision was made to use Packer create an Image via a Jenkins Pipeline which was then stored in the Azure Shared Image Gallery.
- o Once the image was created, Terraform was used to deploy the image as a VM onto Azure. The application also had an external Azure Postgres Server for storing the created Databases.

 Post VM deployment, The configuration of the machine was handled by Ansible roles which were fed into a Linux Daemon to be run whenever the VM restarted or on its first boot. In a nut shell, the configuration of the VM included calls to the API's handling the product and also performed certificate exchange to establish trust with the clients.

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## Terraform Cloud Workspace Creation - Automation

Terraform Cloud, Shell Scripting, Jenkins

- The goal of this project was to create Terraform Cloud Workspaces without any manual intervention.
- Here, I wrote a bash script which established an API Driven workflow for Terraform Cloud, thereby creating workspaces and populating them with workspace-specific variables.

## Azure Kubernetes Cluster Creation and Upgrades - Automation

Terraform Cloud, Azure AKS, Shell Scripting, Jenkins, Terratest

- The goal of this project was to automate the process of creating and upgrading Azure Kubernetes Clusters.
- Terraform Scripts were written by using native terraform resources provided on their official website. A wrapper shell script was added to call the Terraform scripts via Jenkins. Finally, Testing of the entire approach was performed via Terratest.

# Migrating from a Relational Database to AWS DynamoDB

AWS DMS, AWS EC2, AWS DynamoDB

- The goal of this project was to migrate a normalized relational database to an Amazon DynamoDB table in order to optimize on cost savings.
- The various tasks involved were investigating the source database(relational), designing the data model and creating the DynamoDB table, creating the DMS task mapping rules and finally testing the access patterns.

# WordPress Deployment to AWS using Ansible and Terraform

AWS IAM, VPC, S3, Route53, ELB, ASG, RDS, Ansible and Terraform

• Deployed a wordpress blog in order to understand the interactions between various AWS services and used infrastructure orchestration tools to automate the deployment through scripts and minimize manual work.

#### AWS Site-to-Site VPN

AWS EC2, AWS VPC

- Created an AWS Site-to-Site VPN connection using 2 AWS VPC's in different regions altogether.
- The process of creating the VPN connection was carried out by installing and configuring a software-based customer VPN gateway running on an EC2 instance. Openswan was used as the VPN solution as it provides a complete IPsec implementation.

## Monitoring Kubernetes Applications using Prometheus and Grafana

Kubernetes, Prometheus, Grafana

- Installed and configured prometheus and grafana in a kubernetes cluster.
- Setup basic grafana dashboards to chalk out application specific as well as cluster specific performance details.
- Prometheus was used to collect raw data from the cluster whereas Grafana was used to display graphs, heatmaps etc.

### CERTIFICATIONS

- Google Cloud Certified Professional Cloud Architect
- HashiCorp Certified Terraform Associate
- CNCF Certified Kubernetes Security Specialist
- Microsoft Certified Azure Administrator Associate
- AWS-Certified Solutions Architect Associate Level
- CNCF Certified Kubernetes Administrator
- HackerRank-REST API(Intermediate Level)
- Coursera-Specialization Certification- Cloud Architecture with Google Cloud
- Scored 170/190 in Cambridge Business English Certificate Vantage Level
- Database Management Systems and Cloud Computing certified by NPTEL

### TECHNICAL SKILLS

- Languages: C, Python, Java, MySQL, JavaScript(Node.js)
- Cloud Services: Amazon Web Services, Azure, Google Cloud Platform
- Version Control: Git
- Container Technologies: Kubernetes, Docker, Service Meshes(Istio)
- Monitoring Tools: Prometheus, Grafana
- DevOps: Linux, Jenkins, Ansible, Terraform, Chef, Packer

## **EDUCATION**

## Vardhaman College Of Engineering

Bachelor of Technology in Information Technology; CGPA: 9.13

Hyderabad, India Aug. 2016 – Sept. 2020