**Muhammad Furqan**

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***Seeking challenging assignments in the field of IT that would facilitate the maximum utilization and application of my broad skills and expertise in making a positive difference to the organization.***

Bringing over **16+ years** of IT experience with a strong focus on continuous skill development, I have mastered a diverse range of technologies from infrastructure to application tiers. My expertise in **DevOps tools and public clouds**, combined with a deep understanding of containerization and cloud services, positions me as a key player in designing and implementing efficient technology solutions. My background includes extensive work with **OpenShift, Kubernetes, and cloud platforms**, underscoring my capability to address complex business challenges through innovative tech strategies.

* **10+** years of comprehensive experience as a **Cassandra (Database Modeling and Administrator)**, **GCP** & **Amazon AWS** System Engineer
* **2+** years Expertise in **Azure** DevOps
* Experienced in configuration, management and integration tool **Ansible, Puppet, Dockers, Kubernetes, Open shift & Git** and **AWS/Azure** Cloud Services**, Jenkins** and **Terraform**
* Expert-level knowledge on **monitoring and security tools** and services like AWS **security model**, Identity and access management **(IAM),** Data encryption, Hashicrop Vault and **Prometheus/Grafana**

**Core Competencies**

* AWS Azure & Google
* Hadoop Ecosystem
* Dockers & Kubernetes
* Cassandra & ELK
* Bash/Python
* Puppet/Ansible/Terraform
* Open shift/Vagrant
* Oracle /MySQL/Aurora
* Linux/Windows
* Prometheus/Grafana
* DevOps Leadership
* Self-Managed/Presentation
* Strategic Planning
* Proactive/Industrious

**Certifications**

* **AWS Developer - Associate**
* **GCP Could Architect – Professional**
* **Cassandra Certified - Associate**
* **Oracle Database 11g Certified Professional**

**Trainings Attended**

* **Puppet 204 - System Administration Using Puppet**
* **Docker & Kubernetes with open shift**
* **Hadoop Ecosystem-Apache Big Data**

**Professional Experience**

**HSBC (Canada)**

**Snr Data DevOps Consultant CURRENT**

* As a Senior Consultant, my role encompassed spearheading numerous pivotal projects, characterized by my specialized focus on IAC and Public Cloud. This involved:
* Designed and maintained enterprise-grade infrastructure supporting mission-critical applications using Terraform and Ansible.
* Led CI/CD delivery pipeline optimization with GitHub and Jenkins, improving deployment time by 40%.
* Built and maintained Airflow DAGs for batch processing and ETL pipelines supporting data lake ingestion.
* Managed GCP-based deployments for analytics and web workloads, ensuring compliance with organizational policies.
* Architected Elasticsearch clusters for high-performance indexing and real-time data analytics.
* Automated system administration workflows using Bash and Python scripts, reducing manual intervention.
* Provided expert-level production support for complex distributed systems in hybrid cloud environments.
* Authored and maintained operational SOPs and onboarding runbooks.
* Led troubleshooting efforts across Linux-based systems, resolving P1 incidents with strong RCA methodology.
* Integrated security best practices, conducted regular audits, and ensured adherence to compliance mandates.
* Coordinated task rotations and collaborated with offshore teams for 24x7 support coverage.

**Synechron (Canada)**

**Cloud DevOps Consultant (March’19-July`21)**

* Build the CI/CD Jenkins Pipeline for Docker, Ansible, Spark, terraform using share library.
* Build fully automated testing framework on Jenkins CI using **Groovy,** **Chef test kitchen, Docker, Vagrant, Ansible** and **Chef Inspect.**
* Managed AWS S3 bucket policies and leveraged S3 and Glacier for comprehensive storage solutions and data backup processes.
* Setup **Splunk** for resources logging fully automated.
* Migrate and Upgrade **Elasticsearch and Hadoop cluster** on-prem and **AWS** using automation tools.
* Collaborated with development teams to refactor applications for cloud-native deployments, using **Node.js and containerization** technologies.
* Migrate and automate Jenkins Agent on **ECS** using **Cloud-formation**.
* . Engineered a secure **AWS Virtual Private Cloud (VPC),** facilitating site-to-site VPN connections for seamless integration with on-premises data centers.
* Spearheaded the development of **push-button** automation tools, enabling streamlined deployments across **Development, QA, and Production** environments.
* Established guidelines for Puppet module development, advocating best practices in version control with Git, to enhance configuration management protocols.
* Conducted meticulous monitoring and troubleshooting of Linux servers on AWS using Zabbix, Nagios, and Splunk, ensuring high availability and performance.
* Administered AWS services including **CLI, EC2, VPC, S3, ELB, Glacier, Route 53, CloudTrail, WAF, IAM, and Trusted Advisor, optimizing cloud operations.**
* Diligently utilized JIRA for tracking defects/issues and documented all workflow and processes in Confluence, promoting clarity and project tracking.
* Write the ansible playbook and Role for legacy Application management and cloud-base applications deployment Including on-prem **Kubernetes and OPEN-SHIFT.**
* Setup ansible role **for HA-PROXY, Prometheus and Grafana** for Kubernetes Cluster

**Equifax (Canada)**

**AWS Cloud/DevOps Architect (Apirl’18-March’19)**

* I work on migration of Cloudera Hadoop Cluster 5.15.1 using Cloud-Era Director 2.8 from On-perm to AWS Cloud via terraform, Jenkins pipeline groovy and Ansible playbooks.
* Written bash and python scripts integrating Boto3 to supplement automation provided by ansible and terraform task such as EBS vol encryption and scheduling lambda func for aws routine task.
* Orchestrated containerized **Node.js** applications using Docker and deployed them on AWS ECS, managing the clusters and tasks for optimal performance.
* Deployed on EKS cluster services using Terraform and Jenkins pipeline.
* Setting up the CI/CD pipelines using **Jenkins for Build the infrastructure for AWS Services**
* Configured **AWS** Elastic Load Balancers (**ELB**) with EC2 Autos calling groups.
* Addressed and resolved unique challenges during **cloud migration**, including code refreshes and application compatibility with new cloud environment.
* Create and Configure Kafka topics, Solr Collections, HA-HDFS
* Managed RHL/**AWS Role Base security** and Hadoop Admin Load Balancing on AWS EC2 client
* Used **IAM** for creating roles, users, groups and implemented MFA to provide **additional security** to AWS account and its resources using **terraform.**

**Timbre Digital (Auckland)**

**DevOps/NoSQL Engr (Aug’17 –June`18)**

Involved in designing and deploying a multitude application and Apache Hadoop big Data Eco-System utilizing almost all on AWS stack.

**Key Deliverables:**

* Created Ansible for setup OpenShift platform on-prem.
* Set CI/CD groovy pipeline for k8S manifest deployment.
* Create Puppet Modules & provision vagrant systems including Cassandra Cluster services configurations.
* Configure SSL on Apache Cassandra cluster using **puppet modules.**
* implementation experience of **CI/CD pipeline**, automation programmatically by creating Jenkins jobs and pipelines and solving various problems with Maven**, Gradle**as plugins
* Understanding and Troubleshoot Java application for deployment using CI/CCD maven build.
* Utilized **Kubernetes** for the runtime environment of the **CI/CD** system to build, test deploy.
* Deployed **Cassandra** and **ELK cluster** on **Kubernet Container** service
* Monitoring and Administration **Cassandra and ELK** daily routine task using Prometheus and Garafana
* Configured Cassandra 5 nodes Cluster on **AWS** using **terraform, puppet and Jenkins** tool.
* Migration Solution from Oracle Warehouse to a Horton works Platform **using Sqoop, pig AWS cloud.**
* Possess good knowledge in creating and launching EC2 instances using AMI’s of **Linux, Ubuntu, RHEL, and Windows** and wrote **power shell** and **bash** scripts to bootstrap instance.
* Written **cloud formation** templates in json to create custom VPC, subnets, NAT to ensure successful deployment of web applications.
* Responsible for Continuous Integration and Continuous Delivery process implementation using **Jenkins along with Shell scripts** to automate routine jobs.

**Corkerton Pharma (UK-Newcastle), (Nov’15 – June'17)**

**DevOps Infrastructure System Consultant**

Working with Corkerton Pharmacy as an offsite System Consultant to provide support on their infrastructure, meet daily basis operational issues, meet the requirements for Health, and care Application.

**Key Deliverables:**

* Estimating AWS usage costs and identifying operational cost control mechanisms
* Used security groups, **network ACL’s, internet gateways and route tables** to ensure a secure zone for organization in AWS public cloud.
* Worked extensively with AWS services like **EC2, S3, VPC, ELB, Auto Scaling Groups, Route 53, IAM, Cloud Trail, Cloud Watch, Cloud Formation, Cloud Front, SNS, and RDS.**
* Implemented AWS **Code Pipeline** and Created Cloud formation **JSON** templates in **Terraform** for infrastructure as code.
* Experience in working with **ECS Service** plugin in Jenkins which automates the **Jenkins master-slave** configuration by creating temporary slaves.
* Created monitors, alarms and notifications for EC2 hosts using **Cloud Watch**
* Used **Jenkins pipelines** to drive all micro services builds out to the **Dockers registry** and then deployed to **Kubernetes**, Created **Pods** and managed using **Kubernetes.**

**ADNOC Oil & Gas Company, (Abu Dhabi) (Dec’14 – Sep`15)**

**Senior Technical Analyst**

ADNOC is one of the largest oil sector company and IT service provider in the Middle East providing professional services to sister companies and sourcing projects with Government and private organizations

**Key Deliverables:**

* Leading a specialist team to meet SLA targets and deliver strategic projects.
* Manage AWS EC2 instances utilizing **Auto Scaling**, **Elastic Load Balancing** and **Glacier** for our QA and UAT environments as well as infrastructure servers for **GIT/Bit bucket.**
* Created **(Git)** Servers for checking in out code and keep track changing.
* Experience in migrating and implementation of multiple applications from on premise to cloud using AWS services like **SMS, DBMS, Cloud Formation, S3, Route53 Glacier, EC2, RDS, SQS, SNS, Lambda, Cloud Watch, Redshift, Kinesis, Terraform and VPC**
* Used AWS Cloud Formation templates to create custom sized EC2 instances, VPC, subnets, NAT, ELB and Security groups.
* Working on variety of Unix platforms RHEL 5.x/6.x/7, which includes installation, configuring and maintenance of applications for Prod/Stage/Dev environments.
* Migrating an existing on-premises application to AWS using Jenkins pipeline CI/CD

**APD Communication/ESIS, UK & UAE (Mar’11 – Dec’14)**

**System and Database Engineer**

APD Communication is a leading consultancy firm for GHQ control room services in the UK and UAE base. They provide professional and managed services to the Police and Airport sector and partner with VMware, HP, IBM, EMC, Microsoft, Oracle, and Cisco.

**Key Deliverables:**

* Managing over 500+ VMware servers 2003, 2008, R2 and 2012 with VSphere client 5.1. Supervised VM servers for daily backups.
* Participated in a 24/7 on-call helping clients using Windows server in a VM environment. Taking backup and restoration of data and virtual machines using Netapp Solutions.
* Administered and managed a **Oracle server** to monitor both Windows and Linux physical and virtual environments.
* Experience in Virtualization technologies like installing, configuring, VMware vSphere. Creation, management, administration and maintenance of virtual servers and clients.
* Configured Linux on x86 based servers for security and other development projects.
* Configured Networking configuration & Security Configuration on ESX Host.
* Extensive knowledge in advance features of ESX VMOTION, HA and DRS.
* Deployed P2V, V2V MIGRATION using VMware Converter / Plate Spin 6.8.x. Creating host and client VM templates and cloning.

Additional Responsibilities

* Providing support and Managed Oracle and SQL Server Database
* Backup and Recovery of the Databases

**Ora-Tech System (Pvt) Ltd, Pakistan (Dec’06 – Mar’11)**

**System Engineer**

To work with stakeholders to specify, design and select information systems that deliver great value to the organization. This role encompasses aspects of Business Subject Matter Expert, Project Manager and Technical Architect within Oracle Business Unit Sales Target.

**Key Deliverables:**

* Led a team of Oracle System Analysts and monitored production staff.
* Implemented and Maintained Oracle Virtual Box on Oracle Linux Platforms
* Handled systems ranging from Oracle 8.1 to 10.2 running on Linux, Solaris, AIX, Windows and OpenVMS
* Handled and resolved critical client issues on Oracle and Linux platforms.
* File system Tuning and growing using **VERITAS** File System **(VxFS)**, coordinated with **SAN** Team for storage allocation and Disk Dynamic Multi path.
* Provided Disk management support through RAID, LVM and Disk Quota
* Involved in the installation of Oracle database versions 8i, 9i & 10g on Windows, UNIX & Linux
* Manage data warehouse, **Oracle DATAGUARD, and RAC**
* Implemented and managed Oracle RAC database on SAN/NAS hardware

**Educational Credentials**

* **Bachelor’s degree in computer engineering** from Sir Syed University of Engineering, Karachi, Pakistan in 2006
* **Intermediate Certificate (equivalent to UK A Levels)** from Adam Jee Government Science College, Karachi, Pakistan in 2002

**Personal Details**

References: Furnished upon request

**(Muhammad Furqan)**