**Gireesh M   Email:gireeshn30@gmail.com  Cell: (618)-434-0267**

**Professional summary**

* Having more than 8 years of experience building and maintaining infrastructure on AWS, Azure, and GCP.
* Expertise in Amazon AWS Cloud Administration which includes services like: EC2, S3, EBS, VPC, ELB, AMI, SNS, RDS, IAM, Route 53, Auto scaling, Cloud Front, Cloud Watch, Cloud Trail, Cloud Formation, OPS Work, Security Groups.
* Expertise in Architecting and Implementing **Azure** Service Offering, such as **Azure** cloud services, **Azure** storage, IIS, **Azure** Active Directory (AD), **Azure** Resource Manager (ARM), **Azure** Storage, **Azure**, Blob Storage, **Azure** VMs, SQL Database, **Azure** Functions, **Azure** Service Fabric, **Azure** Monitor, and **Azure** Service Bus.
* Expertise in **Google Cloud Platform (GCP)** Cloud Administration, including services such as Compute Engine, Storage, Networking, BigQuery, Cloud AI Platform and Cloud SQL.
* Experience migrating infrastructure and application from on premise to **Azure** and from Cloud to Cloud such as AWS to Microsoft **Azure** and GCP.
* Experience on creating whole infrastructure Web apps, V-net integration, **HCM, Subnets, IAM,** Security groups, Application gateway, AppInsights on **AZURE.**
* Good knowledge in Infrastructure as Code by using **Terraform and Cloud Formation** and Worked on creating Cloud Formation templates for dev, test, staging and production.
* Production experience in large environments using configuration management tools **ANSIBLE.**
* Strong experience in scripting/programing language (Python, Bash shell, Java).
* Proficient in Docker containerization technology and skilled in Kubernetes container orchestration, enabling the creation and management of lightweight, portable, and scalable application containers.
* Experienced in implementing and integrating identity federation protocols such as OAuth, SAML, and OpenID Connect with various identity management systems, including LDAP, Active Directory, and cloud-based services, to provide secure authentication and authorization across multiple systems and organizations.
* Skilled in configuring and customizing popular identity federation implementations such as Okta and OneLogin to meet specific organizational requirements.
* Knowledge of AWS Elastic Beanstalk for app deployments and worked on AWS Lambda with Amazon Kinesis. developed, deployed, and managed event-driven and scheduled AWS Lambda functions.
* Proficient in DevOps tools and practices, including CI/CD pipelines using Jenkins, Travis CI, GitLab CI/CD, and AWS Code Pipeline, and expert in version control systems, specifically Git and its workflows, such as GitFlow and GitHub Flow, to streamline software development and deployment processes.

**TECHNICAL SKILLS:**

**Cloud Computing:** AWS, Microsoft Azure (IAAS, PAAS, SAAS),GCP.

**Microsoft Azure:** Networking (VPN, Express route, UDR, NSG, Load Balancer, Firewalls), Compute, Storage, Azure Active Directory, OMS, Azure Site Recovery, Azure Backup, Azure API, Azure Services, SAN, NAS, SCOM, SCCM, Azure Security Center, Azure Monitoring and RBAC.

**AWS Cloud Tools:**EC2, Elastic Load-balancers, Elastic Container Service (Docker Containers), S3, Elastic Beanstalk, Cloud Front, Elastic File System, RDS, Dynamo DB, DMS, VPC, Direct Connect, Route53, Cloud Watch, Cloud Trail, Cloud Formation, IAM, EMR ELB, RDS, AM

**Programming Languages**: Python, PySpark, Java, Unix/Linux Scripting, PowerShell, YAML and JSON

**Operating System:** Windows, Linux, Unix, Mac OS X. (VMware and HyperV).

**DevOps Tools:** Jenkins, Docker, Kubernetes, Chef.

**Automation Tools:** Ansible Playbooks, PowerShell Playbooks, Azure CLI.

**Azure Developing Tools:** PowerShell, Ansible, Azure CLI, Azure ARM Portal.

**Databases:** MYSQL, MS SQL. Oracle.

**Web Servers:** IIS, HTTP Web Server, Apache Tomcat, WebLogic Application Server.

**Others**: VMWare, RDP, Active Directory, DNS, DHCP, SSH, IPV4, IPV6, Ping, HTTP, HTTPS, and File server,IPSEC,TLS,VPN,BGP.

**PROFESSIONAL EXPERIENCE**

**Client: Capital One, Plano - TX**

**Role: Cloud Engineer/MLOPS     Mar 2022 – Present**

**Responsibilities:**

* Orchestrated AWS and Azure resources, including VPC, EC2, S3, IAM, EBS, Security Groups, Auto Scaling, RDS, and Azure equivalents, utilizing CloudFormation JSON templates for AWS and Azure Resource Manager (ARM) templates for Azure.
* Implemented Elastic Cache in AWS and Azure Cache for Redis to enable quick access to frequently requested databases and performed backups using S3, EBS, RDS services in AWS, and Azure Storage and Backup services in Azure.
* Used AWS Lambda's event-driven architecture to integrate machine learning models with other AWS services, such as Amazon S3 and Amazon Kinesis, for seamless data processing and analysis, resulting in improved data pipeline efficiency and reduced manual effort.
* Designed and implemented a scalable and secure database solution in the cloud for storing and processing large volumes of structured and unstructured data used in machine learning models, utilizing Amazon Web Services (AWS) and Google Cloud Platform (GCP) services such as Amazon RDS, DynamoDB, S3, and Google Cloud Storage.
* Utilized AWS CloudWatch, AWS CloudTrail and other monitoring and logging services to capture and visualize relevant metrics and logs.
* Collaborated closely with data engineering teams in the past to meticulously prepare and preprocess data for model training and inference, successfully creating robust data pipelines. Utilized AWS services such as Athena, RedShift, S3 and AWS Glue to streamline and automate data processing workflows and scheduled ETL jobs.
* Streamlined the model deployment process using Apache Airflow, allowing for faster and more reliable delivery of predictive models to the business, and improving the overall efficiency and effectiveness of the machine learning lifecycle.
* Proficiently used version control systems, including GitHub, Bitbucket, GIT, and DVC to manage and maintain codebase, data, and configurations for both AWS and Azure environments, ensuring seamless collaboration, tracking, and deployment of projects.
* Developed and deployed infrastructure automation scripts using Terraform for efficient provisioning and management of machine learning resources across multiple cloud platforms, including AWS SageMaker and Azure Machine Learning Services and GCP.
* Implemented efficient application packaging and deployment across various environments using Docker, leveraging its capabilities for containerization, networking, and scalability.
* Managed and orchestrated Docker container deployments using Kubernetes on AWS (EKS) and Azure (AKS), ensuring high availability and performance through configuration and optimization of pods, services, deployments, and persistent volumes.
* Experienced in training and deploying machine learning models to production using Vertex AI over GCP (Google Cloud Platform) and setting up model monitoring for a document processing and document understanding product.
* Implemented regular model re-trainings and updates using fresh data to address model drift, resulting in improved model accuracy and reduced false positives.
* Mitigated data drift by implementing data validation and cleaning procedures, ensuring data quality and consistency, and collaborating with data scientists to develop new features and transform existing ones to adapt to changing data distributions and address concept drift. Leveraged Python and PySpark to perform data processing and transformation tasks.
* Introduced cost optimization strategies through automated resource management, ensuring cost savings during non-working hours while maintaining critical workloads in both AWS and Azure environments.

**Client: American Family Insurance, Madison, WI**

**Role: Cloud Engineer/DEVOPS     Aug 2019 – Feb 2022**

**Responsibilities:**

* Designed and implemented scalable and efficient cloud infrastructure solutions using both Amazon Web Services (AWS) and Microsoft Azure, leveraging CloudFormation Templates and ARM templates to create and manage resources.
* Implemented and managed AWS Identity and Access Management (IAM) roles and groups for secure access control and user management, enhancing overall security posture and ensuring appropriate access to resources.
* Creating **Load Balancers** and setup load balancing rules, NAT rules, back end pools. Adding Virtual Machines and VMSS (for auto-scaling as per the load requirements of the application) to Backend pools.
* Analyzed on-premises architecture and devised migration strategies to move complex network architectures to AWS Public Cloud, achieving scalability and cost-efficiency.
* Expertise in implementing **AZURE** **Active Directory** Services, maintaining Replication, Trust Relationship and     enforcing Domain wide Group Policies.
* Conducted thorough incident reviews and root cause analyses, resulting in actionable improvements. Provided on-call support for Linux VMs hosted in AWS and addressed network troubleshooting issues.
* Demonstrated proficiency in **Git** version control, utilizing GitHub for source code management, branching, and merging strategies.
* Implemented blue/green deployments using **AWS CodeDeploy**, minimizing downtime during application deployments and enabling immediate rollback in case of issues.
* Configured and monitored **GKE** **Autopilot**, allowing for automatic node provisioning, scaling, and management, resulting in reduced administrative burden and improved cluster efficiency.
* Utilized **Docker** for containerization, creating Docker images, managing snapshots, and configuring Docker volumes.
* Implemented a **GitOps** workflow, integrating Git with Kubernetes to manage infrastructure and application configurations, and established a CI/CD system with **Jenkins** on Kubernetes, automating build, test, and deployment processes for efficient software delivery and continuous improvement.
* Working with **Helm** Package Manager in creating custom charts for various applications for implementing custom Helm Charts for various types such as Java, Spring boot, Python & dot net-based applications and deployed them in **Kubernetes** Cluster.
* Managed artifacts generated by **Maven** and **Gradle** in the Artifactory repository for efficient build and dependency management.
* Configured **Prometheus** in Kubernetes for monitoring and alerting, including basic monitoring, functional testing, external service monitoring, andAlertmanager; also created various **Grafana** dashboards for metric visualization.

**Client: Leto Business Solutions, Cerritos, CA**

**Role: Cloud Engineer     Feb 2017 – July 2019**

**Responsibilities:**

* Experienced in Linux and Windows administration, automated deployments, and scripting (Bash, PowerShell, Python).
* Proficient in infrastructure as code tools such as CloudFormation, Terraform, and AWS CDK.
* Skilled in containerization using Kubernetes and Docker, creating clusters, and writing YAML scripts.
* Strong experience in implementing CI/CD pipelines, job promotion, and automating routine tasks using Jenkins, GIT, TFS, and shell scripts.
* Familiarity with Software Configuration Management (SCM) best practices in agile, scrum, and Kanban methodologies.
* Knowledgeable in AWS cloud infrastructure, including EC2, RDS, VPC, Lambda, SNS, SQS, CloudWatch Metrics, IAM, S3, EKS, ECS, and Cloud Formation.
* Expertise in migrating enterprise content management platforms, deploying EKS clusters, and integrating configuration management tools like Ansible, Puppet, or Chef with CI/CD pipelines.
* Migrating SMB File Shares to AWS. Automating and deploying AWS Fsx Windows file systems with high availability and fault tolerance in development, QA and production environments.
* Installation and administration of TCP/IP, NFS, DNS, NTP, Auto mounts, mail, and print servers as per the requirement.
* Working with data at scale, MySQL, Postgres, DynamoDB, RDS.
* Strong understanding of security frameworks and standards such as HIPAA, PCI, and implementation of services in compliance with these standards.

**Client: Future-Tech Informatics Systems Pvt Ltd, India**

**Role: DevOps Engineer     Oct 2015 – Dec 2016**

**Responsibilities:**

* Developed and maintained automated deployment scripts and processes, reducing manual intervention and deployment errors.
* Implemented CI/CD pipelines using tools like Jenkins, Travis CI to automate the build, test, and deployment of applications.
* Managed configuration management tools such as Ansible to ensure consistent server configurations.
* Automated server provisioning and configuration, improving scalability and reducing provisioning time.
* Implemented Infrastructure as Code (IaC) using tools like Terraform and CloudFormation to provision and manage cloud resources.
* Utilized Docker for containerization, creating Docker images and Docker Compose files for application deployment.
* Worked with container orchestration platforms like Kubernetes or Docker Swarm for container management.
* Collaborated with development and operations teams to bridge the gap between software development and IT operations.