***VENKAT GANDHAM***

***Ph No: (704)-659-1058* //*****venkatgandham45@gmail.com***//***LinkedIn***

 ******

***Profile Summary:***

* Over 12 years of experience in cloud engineering, DevOps, and automation, with expertise in designing, deploying, and managing scalable, secure, and cost-effective cloud infrastructures across multiple platforms (AWS, GCP, Azure) using Infrastructure-as-Code (IaC), Kubernetes, Docker, and CI/CD methodologies.
* Principal Cloud Engineer with extensive experience in cloud infrastructure design and deployment.
* Expertise in Infrastructure-as-Code (IaC) using Terraform, CloudFormation, and Ansible for cloud provisioning.
* Proficient in multi-cloud environments, particularly AWS, Azure, and GCP.
* Skilled in container orchestration using Kubernetes and Docker for microservice-based applications.
* Extensive experience with CI/CD pipeline creation and automation using Jenkins, GitLab, Bitbucket, and AWS CodeDeploy.
* Strong knowledge of Site Reliability Engineering (SRE) practices to ensure resilient cloud platforms.
* Expertise in cloud-native services like EC2, Lambda, S3, IAM, Route 53, and RDS.
* Designed and deployed Kubernetes clusters on AWS EKS, implementing Helm charts for automated deployments.
* Proficient in cloud security practices, including Zero Trust models, encryption, IAM, and compliance management.
* Mentored junior engineers, promoting a culture of automation-first and security best practices.
* Experienced with cloud monitoring tools such as Prometheus, Grafana, ELK stack, and AWS CloudWatch.
* Implemented cost optimization strategies in cloud environments, ensuring cost-effective resource allocation.
* Automated cloud infrastructure provisioning and management, reducing manual intervention and enhancing efficiency.
* Led incident response efforts, ensuring high system availability and swift resolution of cloud-related issues.
* Created and managed Python, Bash, and Groovy scripts for automating cloud deployments and operations.
* Managed cloud environments across multiple regions, ensuring high availability and fault tolerance.
* Expertise in managing and securing cloud environments, ensuring compliance with industry standards.
* Led cloud security initiatives, including vulnerability scanning, encryption, and identity management.
* Deployed and optimized microservices platforms using AWS Lambda, ECS, and Kubernetes for high-performance environments.
* Worked closely with software development and DevSecOps teams for seamless cloud service integration.
* Configured and managed cloud resources for efficient auto-scaling and load balancing in multi-region environments.
* Proficient in using monitoring tools like Splunk, Prometheus, and Grafana for system observability.
* Led design and implementation of secure, scalable cloud infrastructures in both AWS and GCP.
* Utilized containerization tools like Docker and Kubernetes to deploy scalable applications across multiple cloud platforms.
* Conducted audits and assessments of cloud infrastructure, identifying optimization and improvement opportunities.
* Applied best practices in cloud architecture for creating secure, scalable, and highly available platforms.
* Extensive experience in designing and implementing cloud automation workflows for continuous integration and deployment.
* Collaborated with cross-functional teams to drive cloud adoption and streamline cloud infrastructure processes.
* Hands-on experience with monitoring and logging tools for continuous auditing and performance optimization.
* Extensive experience in cloud troubleshooting and incident management, ensuring minimal downtime and improved system reliability.
* Flourished in both independent and collaborative work environments, showcasing strong learning abilities and effective communication skills.

***Technical Skills:***

* **Cloud Platforms:** AWS, Microsoft Azure, GCP
* **Configuration Management:** Ansible, Octopus Deploy
* **Containerization:** Docker, Kubernetes
* **CI/CD Tools:** Jenkins, Code pipeline, Team city
* **Scripting Languages:** Python, Bash, PowerShell
* **Version Control Systems:** Git, Bitbucket, SubVersion
* **Monitoring and Logging:** Prometheus, Grafana, AppDynamics and Kibana
* **Infrastructure as Code (IaC):** Terraform, CloudFormation
* **Operating Systems:** Linux, Windows (All variant’s)
* **Issue Tracking:** Jira, ServiceNow
* **Database:** My SQL, PostgreSQL
* **Web/Application Servers:** JBoss, Web Logic, Tomcat, Apache HTTP Server
* **Build Tools:** Maven, MS Build
* **Web Technologies:** ASP.NET, ADO.NET, LINQ, IIS, Web Services and WCF
* **Design Tools:** UML (Use cases, Class Diagrams, Sequence Diagrams)

***Certifications:***

* AWS Certified Developer Associate - DVA-C01
* Microsoft Azure Fundamentals - AZ900
* Certified Kubernetes Application Developer – CKAD

***Professional Experience:***

**National Science Foundation, VA (Remote) Nov 2023 - Current**

**Principal Cloud Engineer**

* Led the design, deployment, and management of cloud-based solutions, utilizing Infrastructure-as-Code (IaC) with tools such as Terraform and CloudFormation for AWS provisioning.
* Implemented multi-cloud platform solutions and automated cloud infrastructure provisioning using Terraform, CloudFormation, and Ansible.
* Collaborated with software development teams to integrate cloud services into CI/CD pipelines, utilizing Docker containerization and Kubernetes for orchestration.
* Applied Site Reliability Engineering (SRE) principles to ensure resilient, scalable cloud infrastructure and platforms.
* Designed and deployed secure, cost-effective, and performant cloud environments on AWS, focusing on scalability, automation, and security best practices.
* Developed and managed Kubernetes clusters for containerized application deployment on AWS EKS and utilized Helm charts for automated deployments.
* Configured and optimized cloud-native services such as EC2, S3, Lambda, IAM, Route 53, and RDS in AWS, while ensuring efficient cloud resource usage.
* Automated cloud resource provisioning using Terraform templates, focusing on EC2 auto-scaling, Lambda functions, and security groups in multi-region, multi-AZ environments.
* Implemented Zero Trust security models, ensuring strong encryption, identity management, and compliance with industry security standards for cloud applications.
* Mentored junior cloud engineers, fostering a culture of automation-first mindset and adherence to security protocols and cloud best practices.
* Utilized Prometheus and Grafana for monitoring cloud infrastructure and optimized performance through continuous auditing and cloud environment assessments.
* Implemented CI/CD pipelines and managed Jenkins, Bitbucket, and GitLab CI for automated build, test, and deployment processes across development, staging, and production environments.
* Used Docker for creating containerized environments for Java and microservice-based applications, deploying on Kubernetes using Helm charts and AWS EKS.
* Led incident response and troubleshooting for cloud infrastructure issues, maintaining high system availability and minimizing downtime.
* Collaborated with DevSecOps, software development, and data engineering teams to ensure seamless integration and continuous deployment of cloud services.
* Evaluated and adopted new cloud technologies and tools, staying up-to-date with industry trends to drive innovation and enhance platform capabilities.
* Worked with monitoring and logging tools such as ELK stack, Prometheus, and AWS CloudWatch for comprehensive visibility and compliance checks.
* Implemented automated infrastructure security scans and vulnerability management for Docker containers, ensuring compliance with internal security standards.
* Developed Python, Bash, and Groovy scripts for automating cloud resource management and deployments in AWS, enhancing efficiency and reducing human error.
* Applied best practices in cloud architecture and IaC for the creation of microservice-based platforms using AWS services, enhancing flexibility, scalability, and security.
* Utilized Twist lock CLI to check Docker image vulnerabilities, ensuring compliance and security in the CI/CD pipeline.

***Environment:*** Cloud Infrastructure, Terraform, AWS, CloudFormation, Ansible, Kubernetes, EKS, Docker, Helm, CI/CD, Jenkins, Bitbucket, Prometheus, Grafana, Zero Trust, SRE, Python, Bash, Cloud Security, Microservices, IaC, Cloud Automation, DevSecOps, Cloud Monitoring, Incident Response, AWS.

**Safeway/Albertsons, CA (Remote) May 2021 – OCT 2023**

**DevOps Engineer/ Cloud Engineer**

* Designed and implemented cloud architectures using Infrastructure-as-Code (IaC) principles with tools like Terraform and Ansible, ensuring scalable and secure cloud-native environments.
* Led the automation of cloud infrastructure provisioning and deployment across AWS, GCP, and Azure environments using IaC best practices.
* Collaborated with cross-functional teams (DevSecOps, Software Development, IT support) to optimize performance and implement security best practices for cloud environments.
* Deployed and managed cloud-based solutions with a focus on AWS services such as EC2, Lambda, S3, and RDS, ensuring robust, high-availability infrastructure.
* Managed Kubernetes and containerized applications using Docker, Kubernetes, and OpenShift, creating CI/CD pipelines for automated deployments.
* Architected, deployed, and maintained scalable microservices infrastructure with Kubernetes, Docker, and Amazon EKS for high-performance cloud environments.
* Implemented Site Reliability Engineering (SRE) practices to ensure cloud environments were resilient, scalable, and fault-tolerant, using Prometheus and Grafana for monitoring.
* Led cloud security initiatives, ensuring compliance with Zero Trust Architecture and integrating tools like IAM, Security Groups, and Key Management Systems (KMS).
* Developed automated workflows for continuous integration and continuous deployment (CI/CD) pipelines, integrating Jenkins, GitHub, AWS CodeDeploy, and Terraform for seamless automation.
* Provided technical mentorship to junior cloud engineers, fostering a culture of automation-first, and driving automation of provisioning, configuration, deployment, and monitoring.
* Implemented cloud monitoring with Splunk, Prometheus, and Grafana to enhance system observability and optimize resource usage, improving cloud infrastructure performance.
* Managed multi-cloud environments (AWS, GCP), providing a unified cloud infrastructure for teams to collaborate and deploy applications efficiently.
* Conducted regular audits and assessments of cloud environments, identifying optimization opportunities and ensuring compliance with industry standards and security protocols.
* Built and maintained CI/CD pipelines for cloud infrastructure changes, automating Bicep template builds and deployment using Jenkins and GitHub.
* Optimized cloud architecture for cost and security by implementing cloud-native solutions, managing auto-scaling, and utilizing spot instances and serverless components in AWS and GCP.
* Implemented full-stack, microservice-based architectures, utilizing AWS Lambda, ECS, and Kubernetes for seamless integration of services in the cloud.
* Built and deployed infrastructure solutions using Terraform, CloudFormation, and Ansible, automating configurations and deployments across multiple cloud platforms.
* Designed secure cloud environments, implementing best practices for network security, firewalls, and VPC configurations in AWS and GCP.
* Collaborated with software development teams to integrate cloud services and ensure optimal CI/CD pipeline support, driving innovation in cloud engineering practices.
* Led incident response and troubleshooting efforts for cloud infrastructure issues, leveraging strong problem-solving skills to resolve incidents swiftly and maintain high uptime for cloud-based platforms.
* Collaborated with the team to support the development process by employing tools and methodologies such as Jenkins, Git, Bamboo, AWS CodeDeploy, unit testing, and CI.

***Tools & Environment:*** Cloud Engineer, Principal Cloud Engineer, AWS, Azure, GCP, Kubernetes, Docker, Terraform, Ansible, Infrastructure-as-Code (IaC), Cloud Security, Site Reliability Engineering (SRE), CloudOps, Microservices, CI/CD, Cloud Monitoring, Zero Trust Architecture, Automation, Cloud Platforms, Cloud-native solutions, Splunk, Prometheus, Grafana, Cloud Infrastructure Management.

**Bank of America, Charlotte, NC August 2019 – April 2021**

**DevOps Engineer / Cloud Engineer**

* Developed and deployed applications using Nexus, Bitbucket, and Groovy, significantly reducing manual intervention in the deployment process.
* Upgraded the entire project architecture from Linux 6.8 to 8 and Python from 2.7 to 3.6, enhancing the automation process.
* Migrated build artifacts and dependencies from JFrog Artifactory to the Bank of America registry, resulting in reduced build time and improved build speed.
* Used Ansible Tower to deploy applications to upper environments via CI/CD automation, ensuring high-speed deployments for the application team and business.
* Managed end-to-end CI/CD setups for technologies including .NET, database, Informatica, Python, and SQLLDR.
* Designed Python scripts to automate the data loading process into databases using SQLLDR.
* Developed Python scripts and worked with JSON, Shell, and Curl scripts to invoke workflows.
* Automated the entire process of staging and report generation using Python scripts and AutoSys as the job scheduler.
* Remotely coping files using SFTP, FTP, SCP and WinSCP. Handled Major Incidents along with P2, P3 and P4 Priority Cases.
* Created enterprise templates for Jenkins CI/CD using Python, reducing the need for custom scripts by each team.
* Participated in architecture review meetings and analyzed new design stories to understand business requirements.
* Utilized CI/CD DevOps tools like Jira, Confluence, Git, Bitbucket, Jenkins, and Ansible Tower for code migration.
* Worked on scheduling jobs using AutoSys and performed data quality and profiling using Informatica IDEs (IDQ, MDM).
* Implemented Ansible setups for deploying code in lower environments and production for multiple teams.
* Experienced in debugging Python staging issues, Ansible Tower deployments, and AutoSys issues, providing support to help teams achieve their targets.
* Acted as a stand-by release manager for handling change requests and production deployments.

***Tools & Environment:*** Git, Jenkins, Python, Shell, Ant, Maven, Nagios, Apache Webserver, Ansible, SQL, Autosys, Ansible Tower, Linux

**T-Mobile, Richardson, TX FEB 2017 – AUG 2019**

**Cloud Engineer**

* Implement, maintain and support reliable, timely and reproducible builds for project teams.
* Coordinate/assist developers with establishing and applying appropriate branching, labelling/naming conventions using Subversion (SVN) source control.
* Estimating AWS usage costs and identifying operational cost control mechanisms
* Interact with developers and Enterprise Configuration Management Team for changes to best practices and tools to eliminate non-efficient practices and bottlenecks.
* Created and maintained user accounts, roles on Rally, MySQL, production and staging servers.
* Defined and Implemented CM and Release Management Processes, Policies and Procedure.
* Wrote Chef Recipes to manage configurations and automate installation process.
* Created AWS Route53 to route traffic between different regions.
* Responsible for maintaining 4-5 different testing/QA environments and erection of the prod environment in AWS monitoring live traffic, logs, memory utilization, disk utilization and various other factors which are important for deployment.
* Written Chef Cookbooks for various DB configurations to modularize and optimize end-product configuration.
* Converting production support scripts to Chef recipes. And AWS server provisioning using Chef Recipes.
* Involved in writing Java API for Amazon Lambda to manage some of the AWS services.
* Experience with Build Management Tools Ant and Maven for writing build.xml and Pom.xml.
* Branching, Tagging, Release Activities on Version Control Tools: SVN, GitHub.
* Worked on developing the backend part of the application involving Spring 3, JPA and Hibernate
* Provided CM and Build support for more than four different applications, built and deployed to lower and higher environments.
* Involved in Working with Angular 2 and MVVM to develop the web applications
* Analyze and resolve conflicts related to merging of source code for SVN/GIT.
* Developed and integrated the deployment process in CI environment using Jenkins.
* Architect, implement, then maintain a completely scripted SaaS infrastructure with continuous integration for a Linux environment running in AWS.
* Created deployment workflows in Jenkins, which includes prerelease, release and Post release steps.
* Migrated JIRA across environments and worked on JIRA database dumps.
* Configured and maintained Hudson to implement the CI process and integrated the tool with Ant and Maven to schedule the builds. Took the sole responsibility to maintain the CI Jenkins server.
* Work with development/testing, deployment, systems/infrastructure and project teams to ensure continuous operation of build and test systems.
* Utilize puppet for configuration management of hosted instances within AWS. Configuring and networking of virtual private cloud (VPC).
* Automated the release pipeline to achieve zero touch deployments using Jenkins, GIT.
* Developed website both frontend and backend modules using Python Django Web Framework.

***Tools & Environment:*** AWS, Python, Django, SVN, Jenkins, Web logic, Rally, Shell, Chef, Ruby, Ant, Maven, Linux, Web Framework, GIT

**Optum, New Jersey JAN 2015 – JAN 2017**

**Azure DevOps Engineer**

* Maintained the source code repository in Subversion, handling branching, tagging, and merging processes.
* Collaboration: Worked closely with business analysts and project managers to meet release and build schedule deadlines.
* Continuous Integration: Designed and implemented a continuous build process using Jenkins to prevent build failures and track source code changes.
* Azure DevOps & SQL: Utilized Azure DevOps, Azure SQL Server, and Azure SQL Database to manage BI activities in the cloud.
* Automated Deployment: Maintained consistent and continuous integrated build deployment processes, automation, and feedback loops using UDeploy.
* Bicep Proficiency: Troubleshot and debugged Bicep files, ensuring reliable infrastructure deployments and managing migration projects and version upgrades with minimal downtime.
* Azure BI Solutions: Architected and implemented medium to large-scale BI solutions on Azure using Azure Data Platform services (Azure Data Lake, Data Factory, Data Lake Analytics, Azure SQL DW, NoSQL DB).
* Database Solutions: Designed and implemented database solutions in Azure SQL Data Warehouse and Azure SQL.
* Build Automation: Automated the build process for Java projects using Ant scripts, creating a nightly build environment.
* Rational Tools Deployment: Deployed Rational Tools on IBM and/or client-hosted environments.
* Automation & Scripting: Automated deployment processes using shell scripts and developed Ruby scripts for Puppet to scale infrastructure deployments.
* Build Management: Managed builds and made necessary changes to Ant build scripts for Java/WebSphere-based applications.
* SQL Azure: Extensively used SQL Azure for database needs in various applications.
* Technical Support: Assisted development leads and project leaders with technical and configuration management issues.
* Azure Data Factory: Transformed data using ADF Transformations in Azure Data Factory.
* Documentation: Documented release builds and source control processes and plans.

***Tools & Environment:*** AWS, Python, Jenkins, Maven, Linux, EC2, CloudWatch, Scrum, Jira, Java, MySQL, Shell Scripts.

**Zenq Tech, Hyderabad, India. JUNE 2012 – SEPT 2014**

**Linux Administrator**

* Installation, configuration, and upgrade of RedHat Linux operating system.
* Writing Shell, Perl, and Python Scripts for process automation of databases, applications, backup, and scheduling.
* Assisting with setup, maintenance, operation, and performance of quality assurance.
* Setting up and configuring DNS servers and DHCP servers.
* Deploying and managing virtualization technologies, including Kernel-based Virtual Machine (KVM) and VMware.
* Providing extensive support to large IIS and Windows Applications in an enterprise environment.
* Working on RedHat Linux installation, configuration, and maintenance of applications on this environment. Performing automated installations of Operating Systems using kickstart for Linux.
* Administering the SCCM environment, creating and managing software updates packages.
* Experienced in Red Hat Linux package administration using YUM configuration like assigning IP addresses.
* Performing RPM and YUM package installations, patching, and other server management tasks.
* Monitoring system logs and activity on all servers.
* Implemented input validation using the ASP.NET Input Validation Controls and JavaScript

**Tools & Environment:** Bash, Shell, Perl, Python, Nagios, YUM, RPM, Apache, VMware, SCCM

***Education***:

**Degree:** Bachelor of Engineering | May 2012 | JNTU

**Major:** Electronics Communication and Engineering