Kishore N - Certified Cloud & DevOps Engineer

Summary

Expert Cloud and DevOps Engineer proficient in AWS, Terraform, Kubernetes, Docker, and CI/CD deployments. Demonstrated success in automating deployment processes, optimizing costs, and enhancing security for scalable and reliable systems.

I have consistently delivered impactful results across 20+ projects within the Cloud and DevOps realm especially in Infrastructure as Code and fostering collaboration between development and operations in several projects. My expertise lies in architecting and implementing robust, high-availability solutions with a keen focus on disaster recovery, coupled with a comprehensive skill set across various cloud platforms.

Certifications

- AWS Certified Associate Developer
- AWS Certified Professional DevOps
- CKA: Certified Kubernetes Administrator

Technical Skills

- **Cloud:** AWS, Azure
- **DevOps Technologies:** Docker, Kubernetes, Helm.
- **Infrastructure as code:** Terraform, CDK, CloudFormation, serverless, SAM.
- **Monitoring Tools:** Prometheus, Grafana**.**
- **Continuous Integration:** Jenkins, CodePipeline, Bitbucket Pipeline, GitHub Actions.
- **Continuous Deployment:** ArgoCD.
- **Scripting:** Bash Scripting.
- **Version Control:** GitHub, CodeCommit, Bitbucket.
- **Security and Compliance:** Guard Duty, WAF, Inspector, IAM, ACM.
- **OS:** Linux, Windows.

Education

- Bachelor of Engineering in Information Technology

Tools

- AWS, GitHub, VS Code, Jira

Projects:

Electronic Health Support System:

Managed Infrastructure design and architecture with best practices, utilizing Terraform for effective change management. Implemented Serverless Framework for streamlined deployment and management of serverless components, optimizing overall infrastructure efficiency to handle the multi environment scalable architecture.

Role: AWS DevOps Engineer

Work Contribution:

- Created Terraform modules considering best practices for Disaster Recovery.
- Worked on GitHub CI/CD solution for deployment of application over beanstalk.
- Worked on Services like Amazon MQ, Lambdas, RDS (Global Cluster for DR), AWS
- Inspector.

Media Measurement and Advertising Project:

Worked on the backend of this application. Also worked on the deployment of the application on AWS. Worked on automation of continuous integration and continuous deployment. Handled configuring the databases and migration.

Team Size: 3

Role: DevOps Engineer

Work Contribution:

- Designed an automation step for deploying an Android Application on the Google Play Store.
- Created a CICD pipeline for generating the application artifacts (app bundle). Lambda was used to upload the application on Google Play Store.

- Worked on deploying the backend application. Created a CICD pipeline for automating the deployment process.
- Worked on deploying the Frontend application. Configured the nginx server. Configured ALB and ASG for zero downtime.

Carpooling Application Infra Setup (AWS):

The Carpooling mobile Application for booking rides. This feature rich application consists of notifications to nearby drivers with cash or cashless options. The application provides carpooling options to multiple users. It is a microservices based project. The application was made with many different tools and languages such as PHP, JAVA, Python, Mongo Atlas and AWS Aurora PostgreSQL.

Team Size: 2

Role: AWS DevOps Engineer

Work Contribution:

- Entire Infrastructure is deployed and maintained on AWS EKS and is well coded with Terraform.
- CICD pipeline and deployment was done by GitOps methodology using GitHub Actions and Argo CD.
- Stack includes Kubernetes, EKS, ECR, RDS, Route53, S3, SNS, SQS, VPC, Cognito, EC2, CloudFront.

Open-Source Docker Container Hosting Portal:

The hosting Application provides multiple opensource software stack ready to use for users. The Portal manages thousands of virtual machines running open-source software in production environments for their users.

Team Size: 2

Role: DevOps Engineer

Work Contribution:

- Test and release multi-docker images using Open-Source Software Pipeline onto Clients Portal.
- Tools like docker, react.js, node.js, java, python, JavaScript, TypeScript, cloud resources were used.
- Released images onto client's portal using automated Open-Source Software Pipeline
- Worked on OSS Pipeline.

HealthCare Management Application (AWS):

A Healthcare Management System (HMS) is a comprehensive software solution designed to streamline administrative, financial, and clinical operations within healthcare organizations. It integrates various functionalities such as patient registration, appointment scheduling, electronic medical records (EMR), billing and invoicing, inventory management, and reporting. The Application Stack with manually Deployed EC2 infrastructure with CICD using AWS Code Pipeline with Aurora SQL server instance for Database. DNS Configuration for traffic routing

Team Size: 1

Role: AWS DevOps Engineer

Work Contribution:

- Manual Deployment Tools like VPC, EC2.
- Frontend and Backend Application configuration with required software and services.
- Autoscaling setup and AMI Creation.
- Elastic Load Balancer for frontend and backend.

Games based advertisement platform (AWS):

A games-based advertisement platform built on AWS is a sophisticated system that leverages cloud computing infrastructure to deliver targeted advertising within video games. Utilizing AWS services such as compute, storage, and databases, this platform effectively manages ad placement, tracking, and analytics in real-time. It enables game developers to monetize their creations by seamlessly integrating advertisements that are relevant to players. Additionally, advertisers benefit from precise targeting and performance metrics, optimizing their campaigns for maximum impact. With scalability and reliability provided by AWS, this platform offers a robust solution for monetizing games through advertising while enhancing the gaming experience for users. Resources kike VPC, ECS, database self-hosted mongo in EC2, RDS, load balancer etc

Team Size: 1

Role: AWS DevOps Engineer

Work Contribution:

- Infra Deployment with Terraform.
- Frontend and Backend Application configuration with ECS, CodeBuild, CodeDeploy, CodePipeline.
- Autoscaling setup and AMI Creation.
- Self-hosted Mongo Set up.

Kubernetes and Gitlab Support and Monitoring Tool Implementation:

Team Size: 1

Role: DevOps Engineer

Work Contribution:

- Infra Deployment with Terraform.
- Unit Testing using Terratest for Terraform Modules
- Gitlab Configuration and Installation on Cluster using helm
- Prometheus, Grafana, ArgoCD Installation and Implementation

VR Edutech Application:

An application which provides various services related to the VR devices. It is the infra to provide training on different courses through VR devices. Infrastructure consists of Serverless Architecture with ECS Fargate, API Gateway, Lambdas, ECR, SQS, SNS, SES, CloudFront and S3.

Team Size: 3

Role: AWS DevOps Engineer

Work Contribution:

- ECS Deployment from ECR with CICD using CodePipeline
- Lambda and API Gateway Deployment as backend for the application.
- S3 and CloudFront Distribution deployment for frontend of the application
- Notification and Queue infra creation

SASS Monitoring Portal:

Worked on setting up EKS clusters for efficient pod orchestration, dockerizing backend applications, and implementing monitoring components. Proficient in Helm for infrastructure deployment, configuring ingress for public exposure, hosting static sites on S3 with CloudFront, and managing CI/CD workflows through GitHub Actions.

Work Contribution:

- Established and optimized EKS clusters for seamless pod orchestration, enhancing scalability and performance.
- Successfully dockerized the backend application, improving portability and facilitating streamlined deployment processes.

- Utilized Helm for infrastructure provisioning, ensuring efficient and consistent deployment across the environment.
- Configured ingress for public exposure of pods using a load balancer, enhancing accessibility and user experience.
- Hosted static sites on S3, coupled with CloudFront for efficient content delivery, ensuring high availability and low latency.
- Managed end-to-end CI/CD workflows through GitHub Actions, ensuring automated and reliable software delivery pipelines.

Real Estate Portal:

Actively worked implementing and refining DevOps methodologies, orchestrating the deployment of infrastructure components, and standardizing systems to ensure optimal performance, reliability, and maintainability within the Real Estate Portal development ecosystem.

Work Contribution:

- Created architectural design of both the application and underlying infrastructure on AWS, ensuring scalability, reliability, and optimal performance.
- Implemented Lambda functions to streamline and automate various processes, enhancing operational efficiency and contributing to the overall stability of the Real Estate Portal application.
- Deployment and management of clusters over Elastic Kubernetes Service (EKS), utilizing best practices for orchestrating containerized applications. This involved creating microservices applications and overseeing their deployment within the EKS environment.
- Continuous Integration/Continuous Deployment (CI/CD) pipeline to facilitate automatic deployment using AWS CodePipeline. This streamlined the software delivery process, ensuring rapid and reliable updates to the Real Estate Portal.
- Developed and integrated scripts with Jenkins to automate key processes in the deployment flow.

Cloud Migration and Application Modernization Project:

Utilized Infrastructure as Code (IAC) to standardize resources, exemplifying proficiency in deploying consistent and scalable solutions.

Work Contribution:

- Developed Terraform modules to standardize AWS resources, ensuring consistent deployment.
- Implemented Datadog modules using Terraform for efficient Monitoring and Alerting, including Monitors and Dashboards, specifically tailored for AWS resources like Elastic Beanstalk.

Azure Sentinel Deployment:

Worked on deployment and configuration of Azure Sentinel seamlessly integrated with Azure DevOps Pipeline, showcasing expertise in orchestrating robust security solutions.

Work Contribution:

- Developed an Azure DevOps Multi-Stage Pipeline to enable Azure Sentinel in Log Analytics workspaces.
- Implemented the deployment of Analytic Rules, Hunting Rules, Workbooks, Playbooks, and Data connectors (such as Azure Activity and Defender for Cloud) using ARM templates.
- Worked on seamlessly coordinating end-to-end security solutions, highlighting proficiency in configuring Azure DevOps and Azure Sentinel.