Anshuman Rathore

Technical Skills

Languages: Bash, Python, Golang, JS

Libraries/Tools: Git, Docker, Kubernetes, Datadog, Splunk, AWS, Terraform, Bash, Linux, OpenShift, On-premises,

VMware vCenter, Azure

Experience

Coforge Limited April 2023 - Present

Software Engineer

Greater Noida, Uttar Pradesh

- Managed and optimized a GPU-intensive application on AWS, ensuring high availability and performance for machine learning workloads. Reduced cloud costs by 25% through GPU instance optimization, reserved instance purchases, and efficient resource allocation. Implemented auto-scaling for GPU clusters using Kubernetes (EKS) and custom metrics for workload-based scaling. Set up centralized logging and monitoring using Prometheus, Grafana, and CloudWatch for real-time insights into application performance.
- Developed and deployed a custom application for collecting and visualizing infrastructure and application metrics. Integrated Prometheus, Grafana, and Elastic Stack (ELK) for real-time monitoring, alerting, and log analysis. Automated the deployment of monitoring tools using Helm charts and Kubernetes operators. Provided actionable insights to stakeholders by creating custom dashboards and reports for system performance and resource utilization.
- Spearheaded the migration of on-premise infrastructure from Liquid Web to AWS, ensuring minimal downtime and data integrity. Orchestrated the seamless migration of production databases (MySQL, PostgreSQL) to AWS RDS, optimizing performance and scalability. Implemented automated backup and disaster recovery strategies using AWS Backup and RDS snapshots. Utilized Terraform for Infrastructure as Code (IaC) to provision and manage AWS resources, ensuring consistency and reproducibility.
- Reduced AWS cloud costs by 30% through GPU instance refactoring, leveraging spot instances, and rightsizing EC2 resources. Optimized Kubernetes clusters (EKS) by implementing Horizontal Pod Autoscaling (HPA), resource requests/limits, and cluster auto-scaler. Migrated GPU-intensive workloads to cost-effective GPU instances (e.g., p3, g4dn) while maintaining performance and reliability. Monitored and analyzed cloud spending using AWS Cost Explorer and implemented budget alerts via CloudWatch.
- Designed and deployed a scalable, secure, and highly available cloud infrastructure on Azure for an AI-based application. Provisioned Azure Kubernetes Service (AKS) clusters, Azure Blob Storage, and Azure SQL Database to support AI/ML workloads. Implemented CI/CD pipelines using Azure DevOps for automated deployment of microservices and AI models. Configured monitoring and logging using Azure Monitor and Log Analytics to ensure optimal performance and troubleshooting.

Projects

Automated CI/CD Pipeline Implementation — GitHub Actions, ArgoCD, Kubernetes

- Designed and implemented a fully automated CI/CD pipeline using GitHub Actions and ArgoCD for seamless deployment to Kubernetes clusters.
- Integrated automated testing and monitoring to ensure high availability and reliability of deployed applications.

Infrastructure as Code (IaC) with Terraform on AWS — Terraform, AWS EKS, EC2

- Developed and managed infrastructure as code using Terraform to provision and configure AWS resources, including EKS clusters, EC2 instances, and RDS databases.
- Ensured scalable and secure infrastructure deployment with version-controlled Terraform modules.

Education

Intermediate

Noida Institute of Engineering and Technology

2019 - 2023

Bachelor of Technology in Information Technology

CGPA: 7.6

Bhavan's Kesari Devi Kanoriya Vidya Mandir, Renukoot

Percentage: 71.6

2019

The Aditya Birla Public School, Renukoot

2017

Matriculation CGPA: 8.8