VISHNU RATHORE

Education

Indian Institute of Information Technology

B. Tech in Computer Science and Engineering

Dec. 2020 - June 2024 Nagpur, Maharashtra,India

Experience

Rebid April 2024 – December 2024

 $DevOps\ Engineer$

Bengaluru

- Building and Managing CI/CD automation Pipelines using Jenkins and Helm Charts for seamless Kubernetes deployments on AWS EKS, ensuring efficient cluster management and application delivery.
- Worked on Ansible automation for provisioning Elasticsearch node using ansible playbooks and roles.
- Developed a Jenkins automation pipeline to capture heap dumps and jstack dumps of running pods for Application Memory, CPU utilization analysis and troubleshooting.
- Created Helm charts to automate the deployment of Redis and Prometheus using Kubernetes manifests, ensuring scalability and efficient resource management within the cluster.
- Worked on AWS CloudFront for enhanced application security by implementing Security Headers, setting up Web Application Firewall (WAF) rules for traffic filtering, enabling DDoS protection through AWS Shield, and ElastiCache Redis for RDS database caching.
- Implemented resource optimization strategies on AWS using CloudKeeper, resulting in a 30% reduction in cloud infrastructure costs.
- Worked on developing a Database Role Based Control System to manage access to our databases, Used FastAPI for backend implementation and ReactJs for interactive UI.
- Configured monitoring and visualization of system metrics, database performance, and API health using Prometheus for metrics collection, Thanos for scalable, long-term metrics storage in S3, and Grafana for visualization.
- Monitoring production servers for system resource usage by AWS CloudWatch monitoring. Implementing Sensu checks, Sensu plugins, with real-time notifications sent to Slack channels for proactive incident management.

Emendo AI Dec. 2023 – March 2024

DevOps Engineer Intern

- Developed an end-to-end CI/CD pipeline for a CDK application built with Node.js and TypeScript, utilizing GitHub Actions for building, testing, and deploying across multiple AWS environments.
- Implemented OpenID Connect (OIDC) with GitHub Actions to enhance security for deployments in AWS environments.
- Automated unit testing report generation and notifications, sending reports to Slack channels.
- Built and deployed the Grafana and Prometheus stack using AWS CDK for comprehensive monitoring and observability of API performance and database operations.

Fintricity Limited

August 2023 - Nov 2023

DevOps Engineer Intern

- Implemented an end-to-end CI/CD pipeline using Jenkins for building, testing, and deploying to Kubernetes on AWS EKS, leveraging ArgoCD for GitOps.
- Deployed the Backstage Internal Developer Platform (IDP) on AWS EKS using GitHub Actions, Terraform, Kubernetes, and Bash scripting.
- Developed Lambda functions in Python to automate X-Ray tracing and tag management across AWS resources.

Projects

Blogs Application | MERN, Docker, Kubernetes, Terraform, AWS, Grafana, Prometheus GitHul

- Developed a full-stack Blogging Application allowing users to explore, create, manage blog posts, and view posts from other users.
- Established a CI/CD pipeline with Docker for containerization and Terraform for infrastructure provisioning, including an EC2 instance for Jenkins and an EKS cluster for Kubernetes orchestration.
- Utilized Kubernetes manifests and Helm charts for efficient container management and deployment in EKS and linked Jenkins with GitHub for automated processes and version control.
- Implemented monitoring and observability using Prometheus for metrics collection and Grafana for visualization, ensuring comprehensive insight into application and infrastructure performance.

Technical Skills

Programming Languages: Python, JavaScript, C

Libraries/Frameworks: Node.js, React.js, FastAPI, Express.js, Ethers.js

Technologies: Linux Administration, Shell, Nginx, Docker, Kubernetes, ArgoCD, Helm, AWS CDK, GitHub

Actions, Bitbucket, Jenkins, ELK Stack, Ansible, Terraform, Sensu, Grafana, Prometheus, Postman

AWS Services: EC2, EKS, ECR, ECS, RDS, S3, IAM, Route53, CloudFront CDN, ElastiCache, EBS, VPC,

WAF, Lambda Functions, API Gateway, DynamoDB, SNS, SQS, Cloud Watch

Databases: MongoDB, PostgreSQL, Redis, Elasticsearch