TIRTHRAJ PATIL

DevOps engineer

Nagpur, Maharashtra

India

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PROFILE

DevOps Engineer with hands-on experience in architecting/ automating and optimizing mission-critical deployments over a large infrastructure. Proficient with Configuration Management tools, Orchestration tools, Containerization. Hands-on experience with cloud computing, Infrastructure as a code, and Scripting.

EMPLOYMENT HISTORY

1. **DevOps Engineer** - *HisanLabs Pvt. Ltd., June 2024 – Present*

Key Roles & Responsibilities:
- Performed system monitoring, troubleshooting, and performance tuning using tools like top ,htop, vmstat, iostat.
- Implemented user and group management, including permissions, sudo privileges, and access control. Configured and optimized Apache, Nginx, MySQL and other Linux-based services.
- Scheduled jobs using cron and at jobs.
- Diagnosed system performance issues using ps, netstat, and performed Archiving and Compression solutions using tar.
- Deployed and managed cloud infrastructure on AWS using EC2, ECS (Fargate), S3, VPC, RDS, and Lambda.
- Used Route 53 and CloudFront for DNS and content delivery; implemented SSL certificates for secure web traffic.
- Automated cloud provisioning using Terraform, CloudFormation.
- Integrated IAM and RBAC policies to enforce granular access control and security.
- Implemented security best practices using IAM roles, security groups, KMS encryption, and AWS WAF. Monitored cloud infrastructure using AWS CloudWatch, CloudTrail, and AWS Config.
- Optimized cost and performance of AWS resources through auto-scaling, reserved instances, and spot instances.
- Managed source code repositories using Git, GitHub, GitLab.
- Created and maintained branches, merges, pull requests, and code reviews.
- Implemented Git workflows (Git Flow, Trunk-based development) for efficient collaboration.
- Integrated Git with CI/CD pipelines for automated build and deployment.
- Built and managed Docker images using optimized Dockerfiles.
- Created and maintained Docker Compose configurations for multi-container applications.
- Optimized container performance by reducing image size, caching layers, and minimizing dependencies.
- Worked with Docker Hub, Amazon ECR, or private container registries.
- Deployed, managed, and scaled containerized applications using Kubernetes (K8s).
- Configured Kubernetes clusters on AWS EKS.
- Defined and managed Kubernetes objects (Pods, Deployments, Services, ConfigMaps, Secrets, etc.).
- Implemented Kubernetes networking, ingress controllers, and persistent storage RBAC policies for security..
- Designed and implemented Infrastructure as Code (IaC) using Terraform.
- Developed modular Terraform configurations for reusable infrastructure components.
- Managed cloud resources (AWS, Azure, GCP) using Terraform.
- Integrated Terraform with CI/CD pipelines for automated infrastructure provisioning.
- Ensured state management, remote backends (S3, Terraform Cloud) and version control.
- Configured and maintained Jenkins pipelines for automated builds and deployments.

- Developed and optimized Jenkinsfiles (Declarative & Scripted Pipelines).
- Integrated Jenkins with Git, Docker, Kubernetes, and Terraform.
- Implemented artifact management using Nexus, Artifactory, or AWS S3
- Implemented monitoring, logging, and alerting using Datadog. Improved system performance, reliability, and automation.
- Worked closely with development and operations teams to streamline workflows.
- Worked in Agile environments with cross-functional teams to deliver high-quality solutions iteratively.

Key Achievements
- Reduced deployment time by 70% by implementing a fully automated CI/CD pipeline.
- Improved system uptime and scalability by migrating infrastructure to AWS using Terraform.
- Increased visibility into system performance with end-to-end monitoring and alerting setup.
- Cut infrastructure costs by 30% through optimization and automated resource scaling.
- Successfully led the containerization of legacy applications, enabling faster deployment and easier scaling.

2. **DevOps Intern -** *Greamio Technologies Pvt. Ltd.*
 Key Contributions
- Automated CI/CD pipelines using tools like Jenkins/GitHub Actions to streamline deployments.
- Wrote and maintained Infrastructure as Code (IaC) using Terraform/CloudFormation.
- Configured and managed cloud infrastructure (AWS/Azure/GCP) for scalable deployments.
- Set up monitoring and alerting using Prometheus, Grafana, or CloudWatch.
- Worked with containerization tools like Docker and managed Kubernetes clusters.
- Implemented version control workflows using Git and branching strategies.
- Performed log management and analysis using ELK Stack or similar tools.
- Collaborated with development teams to integrate DevOps best practices.
- Worked on projects given in github.

TECHNICAL SKILLS

Cloud Platforms: AWS, Azure, GCP
IaC: Terraform, CloudFormation
CI/CD Tools: Jenkins, GitHub Actions, Azure DevOps, Argo CD
Containers & Orchestration: Docker (multi-stage builds), Docker Compose, Kubernetes (EKS), Docker Swarm, Helm, Helm Charts
Monitoring & Logging: Datadog, Prometheus, Grafana, CloudWatch, ELK Stack
Security & Identity: IAM, RBAC, KMS, SSL Certificates, AWS WAF
Networking & DNS: VPC, Route 53, Ingress Controllers, CloudFront, netstat, DNS configuration
Version Control: Git, GitHub, GitLab
Web & App Servers: Nginx, Apache, Tomcat
Scripting & Programming: Shell, Python, YAML, Groovy
Operating Systems: Ubuntu, Amazon Linux, CentOS, RedHat
Databases: MySQL, MariaDB
Storage: S3, EBS, EFS, Azure Blob, Table, Queue
Methodologies: Agile, Scrum, DevOps
Collaboration & Tracking Tools: Jira

EDUCATION & CERTIFICATES

Bachelor of Engineering in Computer Science and Engineering

Kubernetes Operators Advanced certified by IBM
Credential ID: e0a711bf23394b678c5b5f0618144f19

AWS Solution Architecture certified by Forage
Credential ID: 72sqzhC7owXvMSX57

Devops Assessment Certified by Learntube.ai
Credential ID: DJA-B-1-1344879-0

OTHER PROFILE

Linkedin:-   **linkedin.com/in/tirthraj-patil-046ba8351**

Portfolio :-   https://t-patil001.github.io/myportfolio/