

# AYUSH TIWARI

DEVOPS ENGINEERING LEAD

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## SUMMARY

Platform Engineering Lead with extensive experience building internal developer platforms and governing SDLC standards across large-scale cloud environments. Expert in Kubernetes-native infrastructure and Infra Automation using Terraform and Crossplane to ensure reliability, performance, and security fundamentals. Proven track record in improving developer productivity through CI/CD pipeline optimization and collaborative problem-solving. Committed to continuous learning and experimentation with modern tools to drive operational efficiency and platform scalability.

## EXPERIENCE

### Senior Specialist

Jul 2025 – Present

TIAA

Pune, MH

- Built and operated platform engineering capabilities using Crossplane for Infra Automation and Kubernetes-native provisioning of AWS resources, improving consistency and reliability across cloud environments.
- Designed and implemented AI agents using AWS Bedrock AgentCore to automate repetitive operational workflows, reducing manual effort by ~30–40% across common tasks.
- Integrated AI-driven assistance into CI/CD pipelines to generate contextual summaries for security findings, test coverage, and deployment changes, reducing review and triage time by ~25–35%.
- Improved developer experience by minimizing the need to manually interpret pipeline outputs, helping teams make faster release decisions and reducing back-and-forth during deployments.
- Ensured production readiness by tuning AI outputs for accuracy and context, avoiding noise and aligning with existing engineering workflows rather than introducing parallel processes.

### Specialist DevOps Engineer

Jan 2025 – Jul 2025

NICE

Pune, MH

- Designed and maintained full-stack CI/CD pipelines and large-scale IaC platforms, ensuring strict governance and alignment with secure software development life cycle (SDLC) standards across the firm.
- Elevated the security posture across all applications by integrating SAST/DAST tools (including SonarQube and Veracode) directly into the CI/CD workflow, mitigating vulnerabilities before production deployment.
- Implemented and managed comprehensive observability platforms using Prometheus, Grafana, and Loki to provide critical, real-time insights for operations, performance tuning, and issue resolution across massive container fleets.
- Enhanced CI/CD efficiency by using API/webhook integration for event-driven automation triggers, streamlining the software delivery process and tightly integrating with Agile/JIRA workflows.
- Served as a subject matter expert and People Leader for a ten-member platform engineering team, driving continuous learning and experimentation with modern tools to optimize platform efficiency and reliability.

## DevOps Engineering Lead

Oct 2021 – Jan 2025

ZS Associates

Pune, MH

- Managed infrastructure platforms for multiple SaaS solutions spread across 25+ AWS accounts, 100+ EKS clusters, 600+ ECS clusters, and 1500+ EC2 and Fargate nodes
- Designed strong operational CI/CD pipelines for infrastructure creation, infrastructure patching, and upgrades on AWS with Terraform along with observability integration with OSS tools like Prometheus, Grafana, Promtail, Loki as well as managed platforms like Datadog
- Designed an Internal Developer Platform using Kubernetes and Terraform to provide a frictionless software delivery experience, improving developer productivity while adhering to security and scalability standards
- Implemented an in-house solution for maximizing GPU utilization through the use of HPA, leveraging DCGM exporter, and Prometheus Adapter
- Implementing event based auto-scaling for EKS cluster nodes leveraging Karpenter along with KEDA and HPA's
- Designed and implemented RBAC configuration for EKS clusters to provide fine grained access to multiple teams across organization. used Azure EntraID and AWS IAM
- Developed re-usable Infrastructure as Code (IaC) modules in Terraform for uniform AWS resource provisioning at scale
- Developed multi-service Helm charts to support micro-services at scale with minimum templating
- Improved overall security posture of all applications by baking SAST and DAST tools in CI/CD pipeline like Wiz, SonarQube, BlackDuck and Veracode and integrated Sysdig Falco to improve runtime protection for container based apps
- Improved DR readiness by implementing active-passive cluster spread strategy across region combinations and integrated third party solutions like Px-Backup and Commvault for backend and restore of stateful components
- Team leading experience of leading a very enthusiastic team of five platform and devops engineers and won most performant team award in cloud domain for 2 years in a row
- Led R&D on emerging technologies, demonstrating a commitment to continuous learning and experimentation to enhance platform efficiency, optimize costs, and ensure future readiness.

## DevOps Engineer

Jan 2020 – Oct 2021

Codal Inc.

Ahmedabad, GJ

- Designed CI/CD for various applications including Python Django, Node, Angular and JAVA utilizing AWS CodePipelines, GitHub Actions, and Jenkins
- Managed orchestration of micro-service architectures using Docker Compose and Kubernetes
- Enhanced Docker and Kubernetes clusters for adherence to security best practices while managing them on AWS ECS, AWS EKS
- Designed automated infrastructure deployment through the design of CloudFormation and Terraform templates
- Designed CI/CD solution for Serverless applications utilizing SAM templates with API Gateway and Lambda
- Reduced latency between services, end-users and optimized billing costs for AWS and Azure clouds
- Worked on migration of multiple applications from AWS to Azure, On-prem to AWS and On-Prem to Azure

## Programmer Analyst

Jul 2016 – Nov 2019

Cognizant

Chennai, TN

- Implemented migration to cloud services for a MES domain client from on-prem architecture
- Implemented Blue-Green deployment strategy to avoid application downtime during updates on critical workflows
- Created visualization for web server access data over Kibana and established a data pipeline with ELK stack
- Prepared log streams in CloudWatch for backend services and performed Linux Administration for EC2 fleet
- Prepared Ansible playbooks to facilitate patching for VM fleet

## EDUCATION

SRM University

2012 – 2016

B.Tech.

GPA: 8.96

## PROJECTS

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**jedi-helm-chart** [github.com/dbcelm/jedi-helm-chart](https://github.com/dbcelm/jedi-helm-chart)

- A Helm chart to manage multiple microservices with unified defaults and flexible overrides

**md2pdf** [github.com/dbcelm/md2pdf](https://github.com/dbcelm/md2pdf)

- tool to convert Markdown files to PDF with **GitHub-like styling**

**mongodb-backup** [github.com/dbcelm/mongodb-backup](https://github.com/dbcelm/mongodb-backup)

- enterprise ready MongoDB deployment, backup and restore implementation governed through Helm Chart

## SKILLS & AWARDS

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**Technical Skills:** Kubernetes, Terraform, Helm, Openshift, Docker, AWS, Azure, ArgoCD, Teamcity, Jenkins, GitHub Actions, Sonarqube, Veracode, Blackduck, Wiz, Sysdig, Splunk, Datadog, ELK, Grafana, Prometheus, Loki, Promtail, Linux, Python, Bash, EKS, ECS

**Certifications:** CKAD - Certified Kubernetes Application Developer, CKA - Certified Kubernetes Administrator, AWS Certified System Solutions Architect - Associate, Certified Docker Associate, AWS Cloud Practitioner