# Harshwardhan Mehrotra

Contact: +91 7771008804/ E-Mail: harsh18262.work@gmail.com/ LinkedIn / GitHub

Dynamic and results-driven **DevOps Engineer** with a strong focus on automation, **Cloud Infrastructure Management**, **and Continuous Integration & Delivery (CI/CD) practices.** Aiming to leverage expertise in optimizing deployment processes and enhancing operational efficiency within technology-driven organizations.

## **Profile Summary**

- DevOps Engineer with hands-on experience in cloud-native infrastructure, automation, and CI/CD implementations, currently working as a Cloud Administrator at ZS Associates
- Adept at aligning **DevOps strategies** with organizational goals to accelerate digital transformation, reduce downtime, and streamline application delivery
- Proven ability to architect and manage secure, scalable, and cost-efficient multi-tenant cloud environments using tools like EKS, ArgoCD, and Helm
- Strong focus on **infrastructure resilience and operational excellence**, with experience creating custom automation solutions that reduce manual overhead and enhance system reliability
- Capable of driving **cross-functional collaboration** between development, operations, and security teams to ensure smooth deployments and governance compliance
- Experienced in implementing **infrastructure as code (IaC)** to ensure repeatable and auditable provisioning across cloud and hybrid environments
- Passionate about continuous learning and applying emerging technologies such as GenAI-integrated microservices, container security, and advanced observability tools.
- Worked extensively with the **Prometheus-Grafana-Loki stack** to enhance observability and monitoring, leading to improved developer productivity and faster issue resolution across teams.
- Maintain and manage a personal **Kubernetes-based homelab** environment, used for hands-on experimentation with emerging DevOps tools, infrastructure automation, and cloud-native technologies.

## Core Competencies

- Cloud Infrastructure Management
- Infrastructure as Code (IaC)
- CI/CD Pipeline Optimization
- Automation & Scripting
- Containerization & Orchestration

- Disaster Recovery & High Availability
- Cost Optimization & Resource Efficiency
- Access Management & Governance
- DevOps Consulting & Stakeholder Collaboration
- Monitoring & Performance Tuning

## **Technical Skills**

- Operating Systems: Linux, Windows Server
- Cloud Platforms: AWS, Google Cloud, On-Prem
- Programming Languages: Python, Bash, SQL
- **Frameworks:** Django, Spring Boot, Spring Framework
- **DevOps & CI/CD Tools:** Jenkins, ArgoCD, GitOps, Ansible
- Infrastructure as Code (IaC): Terraform, CloudFormation
- Containerization & Orchestration: Kubernetes, Helm, Karpenter, Docker, Docker Swarm, Amazon ECS, Amazon EKS
- Infrastructure & Automation: Cloud Infrastructure, Automation, CI/CD Pipelines, AWS CodeBuild, AWS CodePipeline
- Monitoring & Logging: Grafana, Prometheus
- Networking & Security: Networking, SSH
- APIs: REST. API Development

### Organisational Experience

#### Cloud Administrator | ZS Associates | Pune | Jan 2023 - Present

- Automating infrastructure across Windows, AWS, and containerized environments to drive scalability and efficiency
- Designed a scalable multi-tenant EKS setup for Alterigo (50 tenants, 15 GenAI microservices) using ArgoCD and Helm.
   Provisioned infrastructure with Terraform, including custom modules for S3, databases, IAM roles, and VPCs, enabling one-click tenant deployment.
- Optimized EKS architecture to cut costs by 75% per tenant while ensuring high availability and performance.

- Enhancing **CI/CD pipelines** to increase deployment speed and reliability
- Developing a recovery script restoring 90% of Windows servers within 24 hours during the CrowdStrike BSOD incident
- Automating EC2 cleanup and image provisioning, cutting setup time from 2.5 hours to 15 minutes and reducing costs by 25%
- Standardizing **Dockerfiles** for **Python**, **Node.js**, & .NET, reducing image size by **40%** & hardening security for **150+ apps**.
- Automating ArgoCD access and enforcing AD group naming standards, improving governance & productivity by 20%
- Resolving critical issues in the China 2016–2019 migration, including MFA and token accessibility
- Building 15+ custom scripts, including a multi-threaded AWS token generator, reducing manual work by 30%
- Modernizing Elastic Beanstalk and EC2 environments, boosting scalability by 35%
- Advising **150+ app teams** on deployment best practices, enabling seamless DevOps adoption.
- Reducing cloud costs by 75% per tenant through scalable, multi-tenant EKS architecture
- Enhancing DevOps adoption across 150+ teams by standardizing CI/CD pipelines and deployment practices

## Internship

#### DevOps Intern | Peace Haven | Remote | Feb 2022 - Dec 2022

- Automating infrastructure provisioning for clients like **Trident** and **Palmolive** using **Terraform** and **Ansible**, reducing deployment time by **30%** and enhancing resource utilization
- Optimizing CI/CD pipelines with Jenkins across client applications, decreasing deployment duration by 25% and minimizing release downtime
- Resolving DevOps-related client issues with a **95% resolution rate**, boosting system reliability for mission-critical environments
- Implementing cloud automation on AWS using Bash scripting, reducing operational overhead by 20% and streamlining workflows
- Collaborating with cross-functional teams to align DevOps strategies with business objectives, increasing client satisfaction scores by 15%

## **Key Highlights**

- Boosted deployment efficiency by reducing deployment time by 20% through end-to-end pipeline automation
- **Optimized containerization** by standardizing **Dockerfiles** for **Python** and **Node.js** applications, reducing image size by **40%** and minimizing attack surface
- Recovered critical infrastructure by engineering a script that restored 90% of Windows servers within 24 hours
  during the CrowdStrike BSOD incident—surpassing the industry benchmark of 27 days
- **Improved infrastructure resilience** by optimizing deployment workflows and minimizing downtime for a service hosting **40+ microservices**
- Automated access governance by streamlining ArgoCD access management, enhancing compliance and increasing team productivity by 20%

## Projects Undertaken

• Secure Server Manager | Aug 2021 - Jan 2022

Built a secure server management system to store sensitive server data, including **authentication keys** and **IP addresses**, ensuring controlled access and enhanced data protection.

• Competitive Coding Calendar | Jan 2021 - Jul 2021

Developed a centralized web platform to aggregate and display **competitive coding events**, enabling users to efficiently track and manage upcoming contests across platforms.

# **Academic Details**

B.Tech.- Computer Science & Engineering from MIT ADT - School of Engineering, Pune in 2023

### **Personal Details**

DOB: 29th October 2000

Languages Known: Hindi & English