

# Kartik Kain

New Delhi, India | +917042991198 | kartikkain6@gmail.com | Portfolio | GitHub | LinkedIn

Certified Cloud & DevOps Engineer with 3+ years of total IT experience building secure, scalable, and automated infrastructure. Leveraged Terraform and Kubernetes to slash cloud costs by 30% while accelerating deployment cycles by 60%. Passionate about bridging the gap between development and operations through CI/CD automation and modern observability tools.

## SKILLS

**Cloud Platforms:** Amazon Web Services (primary), Microsoft Azure Cloud, Google Cloud Platform |

**Containerization:** Docker, Docker-compose, K8S (EKS) |

**Infrastructure as Code:** Terraform, CloudFormation, Ansible |

**CI/CD & VCS:** Jenkins, GitLab CI, Azure DevOps, ArgoCD |

**Security Tools:** IAM, KMS, SonarQube, OWASP, Trivy |

**OS & Scripting:** Linux (ubuntu), Python (Boto3/Automation), Shell Scripting |

**Observability:** Prometheus, Grafana, AWS Cloudwatch |

**Methodologies:** Agile, Microservices, GitOps, DevSecOps |

## PROFESSIONAL EXPERIENCE

### DevOps Engineer (Analyst) | HCLTech | Noida, Uttar Pradesh, INDIA

July, 2023 – Present

- Designed and implemented high-availability architectures including RDS Multi-AZ and S3 cross-region replication across AWS, utilizing auto-scaling and load balancing to boost system availability by 40%.
- Achieved a 30% reduction in AWS monthly burn by implementing automated right-sizing and migrating non-production workloads to Spot Instances using Terraform. I also engineered AWS Lambda functions using Python to automate the cleanup of unattached EBS volumes, ensuring a highly cost-efficient infrastructure.
- Eliminated manual configuration drift by engineering immutable infrastructure using Terraform and CloudFormation. Reduced manual provisioning efforts by 70%, allowing the team to focus on feature development rather than maintenance.
- Revamped software delivery workflows by building robust CI/CD pipelines with Jenkins and GitLab CI. Automated build, test, and deployment phases, resulting in a 60% reduction in deployment time and accelerating Time-to-Market (TTM).
- Spearheaded the migration of enterprise applications from monolithic structures to microservices architecture using Docker and Kubernetes (EKS). Enhanced system scalability and achieved zero-downtime deployments via Blue/Green or Canary deployment strategies.
- Hardened AWS environment by implementing IAM Least Privilege policies and KMS encryption, reducing the attack surface by 40%.

### IVR Developer (Analyst) | HCLTech | Noida, Uttar Pradesh, INDIA

July, 2022 – July, 2023

- Engineered IVRs, Outbound Dialers and RESTful API integrations for enterprise clients while collaborating with the operations team to ensure high availability for production services.

### Intern at HCLTech | Noida, Uttar Pradesh, INDIA

December, 2021 – June, 2022

- Completed an intensive 6-month technical training program focused on Linux, Networking, and Databases while supporting core IT infrastructure project deliverables.

## KEY PROJECTS EXECUTED

### 1. Project: Containerized Microservices Architecture Implementation using NGINX |

[GitHub Link](#)

#### Key Achievement:

- Successfully designed and deployed a multi-service application architecture using Docker Compose and NGINX reverse proxy.
- Achieved seamless path-based routing (/service1, /service2) between Golang and Python services via NGINX in a containerized environment.
- Reduced deployment complexity by enabling single-command service orchestration with Docker Compose.
- Ensured service reliability with integrated Docker health checks, reducing container-level failures.
- Improved local development efficiency by 80% through automated build and deployment processes.
- Maintained 100% service availability across isolated containers using Docker bridge networking.

## 2. Project: Automated EKS Cluster Provisioning via Terraform & GitOps

[GitHub Link](#)

### Key Achievement:

- Provisioned a **fully managed AWS EKS cluster** using **Terraform**, including **VPC, subnets, IAM roles**, and managed node groups with minimal manual intervention.
- Deployed a production-ready **NGINX application** using **Kubernetes manifests** with **ClusterIP service type**.
- Implemented **ArgoCD GitOps workflow**, enabling declarative application deployment and automated sync with a remote **Git repository**.
- Exposed the **ArgoCD UI** using a **LoadBalancer service** and secured operational access via **port-forward** for local environments.
- Achieved **90% reduction in manual deployment steps** by integrating **infrastructure-as-code** and **Git-based CD pipelines**.
- Demonstrated complete **CI/CD** and operational flow including **health checks and access routing**.

## 3. Project: Deployment of MERN Stack Application using DevSecOps capabilities (DevSecOps)

[GitHub Link](#)

### Key Achievement:

- Designed & Implemented separated end-to-end **CI & CD pipelines** using **Jenkins**, reducing production rollbacks by eliminating manual deployment errors.
- Automated dependency checks using **OWASP**, code quality scans using **SonarQube**, and filesystem scans using **Trivy** within the pipeline.
- Identifying and mitigating **150+ vulnerabilities**, reducing critical code smells by **40%**, and scanning **200+ container images** to ensure secure, compliant, and high-quality code.
- Automated **Docker Image build and deployment** to **Kubernetes Clusters** using **ArgoCD**, enabling seamless application updates from **GitHub** commits using **Webhooks**. This helps us to achieve **100%** consistency between development and production environments.
- Monitored **EKS cluster**, kubernetes components and workloads using **Prometheus** and **Grafana** via **HELM Charts**.
- Integrated **SMTP role** to automate **email notification** for every Build Status via **Jenkins**, improving the incident response time by **70%**.

## ACHIEVEMENTS & CERTIFICATIONS

- **Cloud & DevOps Expert Program** | Cloudthat Technologies | Nov/2024 - May/2025 | [Certificate](#)
- **Google Cloud Platform: Associate Cloud Engineer Certified** (validity 06/2023 - 06/2026) | [Certificate](#)
- Secured **2nd position** at **Amazon driven The Elevate Day competition** at HCLTech Office.
- **HCL Spot Award** winner to deliver tasks within stipulated timeframe for clients.

## EDUCATION

**Bachelor of Technology – Mechanical & Automation Engineering** | **Guru Gobind Singh Indraprastha University** | 2014 - 2018 | First Division

**Class 12th - (CBSE)** | **Guru Harkrishan Public School** | 2013 - 2014 | First Division