

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 |
- **Google Cloud Platform: Associate Cloud Engineer** Certified (validity 06/2023 - 06/2026) |
- 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.

[Certificate](#)

[Certificate](#)

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