Kartik Kain

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

Certified Cloud & DevOps Engineer with **3+ years** of 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, Git/GitHub **|**
Security Tools: IAM, KMS, SonarQube, OWASP, Trivy **|**
OS & Scripting: Linux, Bash/Shell Scripting, Python (Basic) **|**
Observability: Prometheus, Grafana, AWS Cloudwatch, ELK Stack **|**
Methodologies: Agile, Microservices, JIRA, GitOps, DevSecOps **|**

PROFESSIONAL EXPERIENCE

DevOps Engineer (Analyst) | HCLTech | Noida, Uttar Pradesh, INDIA **July, 2023 – Present**

- Designed and implemented high-availability (HA) architectures across **AWS** and **GCP**, utilizing **auto-scaling** and **load balancing** to **boost system availability by 40%.** Executed cost-optimization strategies **(Rightsizing, Spot Instances)** that reduced monthly cloud infrastructure spend by **30%**.
- 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.
- Championed a **DevSecOps** culture by integrating **security protocols** and **compliance checks** directly into the pipeline. Partnered with security and operations teams to harden system architecture, ensuring alignment with industry security standards.

IVR Developer (Analyst) | HCLTech | Noida, Uttar Pradesh, INDIA **July, 2022 – July, 2023**

- Developed and implemented modern contact center solutions, integrating IVRs, Outbound Dialers, Built and maintained RESTful API integrations and Automated Callback systems for diverse enterprise clients.
- Collaborated with operations teams to resolve critical application issues, ensuring high availability for voice response systems.

Intern at HCLTech | Noida, Uttar Pradesh, INDIA **December, 2021 – June, 2022**

- Trained at HCLtech on the subjects related to being an IT Engineer for 6 months *(2 months virtual training + 4 months On-job training)*. Completed structured training on **Networking**, **Databases**, **Linux**, **Windows Server**, **SQL**, and **Virtualization**.
- Contributed to project deliverables within deadlines as part of the IT engineering team.

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%**.

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

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
- **AWS Solution Architect Associate** SAA-C03 Course by **Udemy**.
- Secured **2nd position** at **Amazon driven The Elevate Day** competition at HCLTech Office.