

MOHAMMAD KASIM

[kasim2908](#) | [Mohammad Kasim](#) | kajsosim@gmail.com | [+91 941123556](#) | [Portfolio](#)

Projects

1. 3-Tier Application Deployment on AWS EKS (Kubernetes)

[GitHub Link](#)

Designed and deployed a **3-tier microservices architecture** (Frontend, Backend, Database) on AWS EKS across **2 availability zones**.

Configured **10+ Kubernetes resources** including Deployments, Services, Ingress, and ConfigMaps for service discovery and traffic routing.

Containerized **3 application services using Docker**, enabling scalability for **100+ concurrent users**. Implemented **Auto Scaling and Load Balancing**, achieving **99% uptime** and high system reliability.

2. CI/CD Pipeline Automation using Jenkins, Docker and AWS

[GitHub Link](#)

Built a **5-stage CI/CD pipeline** using Jenkins, GitHub Webhooks, Docker, and AWS EC2 for automated workflows.

Reduced manual deployment effort by **90%** through continuous integration and delivery practices.

Optimized deployments using Docker, reducing release time from **30 minutes to 5 minutes (6x faster)**.

Integrated monitoring and alerts with **100% pipeline visibility** using email notifications.

3. Infrastructure Automation on AWS using Terraform (IaC)

[GitHub Link](#)

Automated provisioning of AWS infrastructure (VPC, EC2, IAM) using Terraform in **5 minutes**.

Developed **6+ reusable Terraform modules**, improving scalability and reducing duplication by **60%**. Implemented remote backend using **AWS S3 and DynamoDB** for secure state management and locking.

Reduced manual provisioning effort by **80%** using Infrastructure as Code (IaC).

4. Full Stack Chat Application Deployment using Kubernetes

[GitHub Link](#)

Developed a **real-time full-stack chat application** using React, Node.js, and MongoDB on Kubernetes.

Designed a **4-stage CI/CD pipeline** using GitHub Actions, Docker, and Kubernetes for automated deployment.

Managed **10+ Kubernetes resources** including Pods, Services, Ingress, and Secrets for secure communication.

Achieved **99% availability** using container orchestration, scaling, and rolling updates.

Education

2023 – Present	Birla Institute of Applied Sciences, Bhimtal, Uttarakhand B.Tech in Computer Science and Engineering	CGPA: 7.2
2022	Chhauni Children's Academy Class 12th	82%

Tech Stack

- **Cloud Infrastructure:** AWS
- **Infrastructure as Code(IaC):** Terraform
- **Configuration Management:** Ansible
- **Version Control:** Git, GitHub
- **Monitoring&Logging:** Prometheus, Grafana
- **Containers&Orchestration:** Docker, Kubernetes
- **Scripting:** Bash, Python
- **Operating Systems:** Linux (Ubuntu)
- **Other:** YAML, Networking

Accomplishments

- National Finalist – Smart India Hackathon (SIH) 2025.
- 3rd Runner-up – NASA Space Apps Challenge 2025.
- Earned YOLO and Pull Shark badges on GitHub for open-source contributions.
- Active technical blogger on Hashnode publishing DevOps and cloud engineering articles.