

KARAN KUMAR

officialkaran39@gmail.com | +91 7903214466
github.com/09karankr | linkedin.com/in/karan-kumar-122787226

PROFESSIONAL SUMMARY

Software Engineer at Capgemini with hands-on experience in GCP, Docker, Kubernetes, and full-stack JavaScript/TypeScript development. Currently learning the modern AI/ML stack -- PyTorch, Hugging Face, LangChain, and RAG-based LLM applications. Strong CS fundamentals with 400+ DSA problems solved on CodeChef and LeetCode.

TECHNICAL SKILLS

- **Languages:** Python, Java, C++, JavaScript, TypeScript, SQL
- **AI / ML:** PyTorch, Hugging Face Transformers, LangChain, RAG, FAISS, OpenAI API, Pandas, NumPy, Prompt Engineering
- **Web:** React.js, Next.js, Node.js, Express.js, REST APIs
- **Cloud:** AWS, GCP, GCS, BigQuery
- **DevOps:** Docker, Kubernetes, Jenkins, Terraform, Ansible, Prometheus, Grafana, CI/CD
- **Databases:** MySQL, BigQuery
- **Tools:** Git, GitHub, Linux, VS Code
- **Concepts:** Data Structures & Algorithms, OOP, DBMS, Operating Systems, Computer Networks

PROFESSIONAL EXPERIENCE

Capgemini - Software Engineer

Sep 2025 - Present

- Deploy and manage scalable containerized applications on GCP, leveraging GCS buckets for structured and unstructured data storage across services.
- Built backend-centric Next.js services using SSR and API routes, integrating SQL and BigQuery to process large-scale datasets and improve API response latency by ~30%.
- Containerized applications with Docker, enabling consistent deployments and smoother release workflows across environments.

Capgemini - SDE Intern

May 2025 - Jul 2025

- Completed 8+ weeks of structured Core Java training, applying OOP, collections, and exception handling in 2+ mini-projects.
- Designed CI/CD pipelines using Git, Jenkins, and Docker, automating build and deployment for 3+ services and integrating Java, Python, and DevOps tools.

KEY PROJECTS

AI RAG Assistant with PyTorch and LangChain

Mar 2026 - Apr 2026

Python, PyTorch, LangChain, Hugging Face, FAISS, OpenAI API

- Built a Retrieval-Augmented Generation (RAG) chatbot ingesting 100+ documents, using sentence-transformer embeddings and FAISS vector search for sub-second semantic retrieval and citation-backed answers.
- Fine-tuned a Hugging Face transformer on domain QA pairs using PyTorch with LoRA adapters, reducing training memory footprint by ~60% on a single GPU.
- Orchestrated multi-step LLM workflows using LangChain agents and tool-calling, enabling structured query decomposition, function execution, and grounded responses via the OpenAI API.

DevOps Ultimate CI/CD Pipeline on AWS

Sep 2025 - Oct 2025

AWS, Jenkins, Docker, Kubernetes, Terraform, Ansible

- Built an AWS-based CI/CD pipeline automating build, test, security scans, and Kubernetes deployments for containerized microservices.
- Configured a 10+ stage Jenkins pipeline integrating GitHub, Maven, SonarQube, Nexus, Docker, and Kubernetes; provisioned infrastructure with Terraform and Ansible, reducing setup time by ~80%.
- Implemented Trivy container security scanning and Prometheus-Grafana monitoring, achieving a 90% reduction in deployment effort.

Full-Stack Course Management Platform

Jul 2024 - Aug 2024

Node.js, Express, MongoDB, JWT, Zod

- Built 10+ REST APIs for signup/signin and course CRUD with modular routing and Zod-based input validation, supporting Admin and User flows end-to-end.
- Implemented JWT authentication and bcrypt password hashing, securing user credentials and role-based access across all protected endpoints.

Video Conferencing Application

Dec 2023 - Jan 2024

React, TypeScript, Node.js, Express, WebRTC, Socket.io

- Built a real-time video conferencing app with low-latency peer-to-peer audio/video streaming over WebRTC and a room-based architecture supporting multi-user meetings.
- Integrated real-time chat and join/leave notifications via Socket.io to improve meeting collaboration.

EDUCATION

B.Tech, Computer Science - Technocrats Institute of Technology, Bhopal

CGPA: 9.05 / 10

Oct 2021 - May 2025

CERTIFICATIONS

- AWS Certified Cloud Practitioner (CCP)
- Google Cloud Innovator
- GitHub Foundations Certification
- Docker Hands-On: Containerization Fundamentals