

KAPIL

Dehradun, Uttarakhand, India

+91-9996547555 ky8050989@gmail.com LinkedIn Github

EDUCATION

University of Petroleum and Energy Studies

2023 – 2027

B.Tech in Computer Science and Engineering — CGPA: 7.91/10

Dehradun, Uttarakhand

COURSEWORK

- | | | | |
|-------------------|--------------------|-----------------|-------------------|
| • Data Structures | • Machine Learning | • Generative AI | • Microsoft Azure |
| • RAG | • Transformers | • NLP | • DevOps |
| • Computer Vision | • Deep Learning | • LangGraph | • LLM |

EXPERIENCE

Weazy — Intern

June 2025 – Present

Remote

- Developed a Flask-based Smart Image Updater with HTML/CSS frontend and JSON-based product catalog.
- Implemented basic AI logic for image relevance using product name embeddings and prepared vision model hooks.
- Structured the app for deployment with local-to-cloud image storage abstraction.


OPEN Community - Student Developer

Feb 2025 – Present

Dehradun, Uttarakhand

- Contributed to open-source Python and JavaScript projects: features, bug fixes, documentation.
- Led knowledge-sharing sessions on Flutter and Git workflows for onboarding contributors.
- Participated in sprints and peer-reviewed community contributions.

PROJECTS

RAG Based Assistant 



LangChain, FastAPI, Docker, Kubernetes, FAISS

- Engineered a scalable, containerized Retrieval-Augmented Generation application using LangChain, FastAPI, and FAISS vector database supporting **6+** concurrent users.
- Designed a multi-stage query pipeline prioritizing local knowledge base, with **LLM Fallback** to **Wikipedia API** and LLM generation, boosting answer accuracy by **35%**.
- Optimized deployment workflows using Docker and Kubernetes, reducing setup time by **40%** and enhancing maintainability across environments.

DeepFake Detection Model 

Deep Learning, Xception CNN, Streamlit

- Developed an image-based deepfake detection system by **fine-tuning** Xception CNN model on facial forensics datasets.
- Achieved an accuracy boost from 70% to 83% by applying **dropout layers**, **early stopping**, and image augmentation
- Explored model explainability through saliency maps to identify manipulated regions in fake frames.

URLZAP : URL Shortener — CLI  | Web App 

Azure App Service, GitHub Actions, Argparse

- Built a scalable URL shortening tool with both a CLI utility and a Web App, deployed on Azure.
- Integrated CI/CD pipeline via GitHub Actions for automated deployments and zero-downtime updates.
- Engineered CLI with support for **batch processing**, **URL validation**, and persistent **usage history tracking**.
- Optimized for performance with capacity to handle 3K–4K requests on daily basis.

TECHNICAL SKILLS

Languages: Python, C/C++, Java, JavaScript, SQL, HTML5, CSS3

ML/DL: TensorFlow, Pytorch, scikit-learn, OpenCV, Streamlit, Xception CNN, NLTK

Frameworks: LangChain, Django, FastAPI, Flask, Pydantic

DevOps: Docker, Kubernetes, Git, GitHub, Bitbucket, GitLab CI/CD, Jenkins, Ansible, Terraform, Jira.

Cloud: Azure VM, Azure Storage, Azure Functions, Azure ML, Azure Cognitive Services, Azure DevOps, AWS Sagemaker

Soft Skills: Communication, Team Work, Public Speaking, Collaboration

Databases: PostgreSQL, MongoDB , MySQL, FAISS, ChromaDB

CERTIFICATIONS

- Introduction to Generative AI – Coursera
- Introduction to Data Science - Cisco
- Fine-tune a language model with Azure AI Foundry - Microsoft