

Rohan R

Bangalore, India — +91 7411969633 — rohanramaswamy12@gmail.com — GitHub — Portfolio

Professional Summary

AI & Data Science student with hands-on experience in OCR, Computer Vision, Machine Learning, and Generative AI. Passionate about leveraging AI technologies to solve real-world problems with a strong foundation in Python, OpenCV, and enterprise-level data processing.

Education

Global Academy of Technology

Bachelor of Engineering in Artificial Intelligence & Data Science

GPA: 9.48/10

Bangalore, India

Expected 2026

Projects

Face Anti Spoofing System — Python, OpenCV, TensorFlow, Keras, StreamLit, SVM — GitHub 2025

- Developed a dual-approach system to detect spoofed faces using LBP + SVM and a lightweight CNN, achieving high accuracy on 12k+ images.
- Implemented robust preprocessing including face detection, cropping, resizing, normalization, and data augmentation, enabling real-time webcam testing with OpenCV.
- Modular project pipeline with feature extraction, model training, and inference, supporting experimentation, model persistence (joblib/.h5), and optional StreamLit deployment.

Automatic Image Enhancer — OpenCV, Python, NumPy, Streamlit — GitHub

2025

- Enhanced images using CLAHE for brightness and contrast improvement across multiple formats.
- Developed a Streamlit interface for real-time upload, enhancement, and side-by-side visualization.

AI-Powered Document Search & Question Answering (RAG System) — Python, Streamlit, FAISS, Sentence-Transformers, Gemini API — GitHub 2025

- Developed an intelligent document search and question-answering system using RAG with Google Gemini.
- Combined FAISS-based vector similarity search and Sentence-Transformers embeddings to enable context-aware knowledge retrieval from uploaded documents and URLs.
- Implemented a secure Streamlit interface supporting local embedding generation, semantic query processing, and real-time, explainable AI responses.

Technical Skills

Languages: Python, SQL, C++

ML & AI: PaddleOCR, Scikit-learn, Computer Vision, TensorFlow, Keras, NLP, Deep Learning, NumPy, Pandas, Generative AI, Prompt Engineering

Tools: Docker, Git, GitHub, Jupyter, Linux, Streamlit, Tableau, Power BI

Web: HTML, CSS

Core CS Concepts: Object-Oriented Programming (OOP), Data Structures and Algorithms (DSA), Computer Networks, DBMS, Operating Systems

Certifications

Data Science: Python for Data Science (NPTEL), Data Science for Engineers (NPTEL)

Infosys Springboard: Python Foundation, Front-End Web Developer, Natural Language Processing and Web Technology

Cybersecurity: Cybersecurity and Privacy (NPTEL)

Activities

Participant: HackaLeague 1.0 at Global Academy of Technology

Interests: Technological Innovation, Video Games, Music