Omanshu Gupta

 Omanshugupta | Omanshu Gupta | om.omanshuazm979@gmail.com | 6394474306

Skills

Programming & Data :	Python, SQL, Pandas, NumPy, Data Analysis, EDA, Statistics
Machine Learning & AI :	ML, Deep Learning, NLP, Transformers(BERT, GPT), Generative AI, LangChain, LangGraph, LLMs
Computer Vision :	OpenCV,TensorFlow, Keras, PyTorch,YOLOv5
Visualization Reporting :	Power BI, Tableau, Matplotlib, Seaborn, Excel
Tools & Platforms :	Git,Jupyter Notebook, Visual Studio Code, Google Colab

Projects

Multi-Modal Information Retrieval Assistant(MIRA)   github

- Developed MIRA, a multi-modal RAG system to query PDFs using text, tables, images, and mathematical formulas.
- Built a complete embedding and retrieval pipeline using SentenceTransformers, Pinecone, and metadata-driven vector search.
- Implemented a FastAPI backend with local LLM inference and Gemini fallback for efficient document question-answering.
- Improved answer accuracy and reduced hallucinations, gaining hands-on experience in building production-ready GenAI systems.

AI Powered Travel Planner   github

- Built an AI Powered Travel Planner that generates flights, hotels, places to visit, itineraries, and cost estimates from user inputs.
- Designed a multi-step LLM workflow using LangGraph to analyze preferences and produce structured travel plans.
- Developed an interactive Streamlit application with itinerary download and email delivery features.
- Enabled personalized, budget-aware trip planning, gaining hands-on experience in building end-to-end generative AI applications.

Driver Drowsiness Detection & Security System   github

- Developed a real-time driver monitoring system using OpenCV to perform face-based driver authentication and drowsiness detection.
- Implemented eye-closure–based drowsiness detection with live alerts, audible warnings, and automatic event capture.
- Built both Streamlit UI and CLI workflows, integrating SQLite for driver data storage and SMTP-based email notifications.
- Improved driving safety and system reliability, gaining hands-on experience in computer vision, real-time processing, and security-focused AI applications.

Work Experience

Web Development Intern at F Salon Academy LLP   *Aug 2024 – Sep 2024*

- Led a team of 8 interns to develop a full-stack web application, overseeing backend architecture, guiding team collaboration, and ensuring on-time delivery of project milestones.

EDUCATION

Mahatma Jyotiba Phule Rohilkhand University   Dec. 2021 - July 2025
Bachelor of Technology - Computer Science and Information Technology   CGPA : 7.57

CERTIFICATES

- **Responsible And Safe AI Systems** : NPTEL
- **Gemini for Data Scientists and Analysts** : Google
- **Oracle Cloud Infrastructure 2025 Certified Generative AI Professional** : Oracle
- **Python (Basic) Certificate** : HackerRank