HEMANTH RAJ M V

Bengaluru, Karnataka

+91 7204946126 — Hemanthrajmv@gmail.com — Portfolio — GitHub — LinkedIn

Education

BMS College of Engineering, Bengaluru   October 2023 - Present
B.E in Computer Science (Data Science) Engineering, **CGPA: 8.15**

Relevant Coursework

⋆ Machine Learning   ⋆ Data Mining and Predictive Analysis   ⋆ Data Visualization
⋆ Data Structures and Algorithms (Intermediate level)

Technical Skills

Programming Languages:
⋆ C   ⋆ Java   ⋆ SQL   ⋆ Python

Data Visualization:
⋆ Power BI   ⋆ Matplotlib   ⋆ Seaborn   ⋆ Tableau

Backend & Systems:
⋆ FastAPI   ⋆ REST APIs   ⋆ Docker

Machine Learning and AI:
⋆ Scikit-learn   ⋆ NLTK   ⋆ TensorFlow   ⋆ LangFlow   ⋆ RAG Pipelines

Collaboration and Environment:
⋆ Git   ⋆ GitHub   ⋆ Jupyter Notebook

Projects

YouTube Data Analytics | **PySpark, Streamlit, Pandas, Plotly, Big Data**
- Built a Big Data analytics dashboard analyzing YouTube trending patterns across 113 countries using Apache Spark for 5.5GB+ dataset processing.
- Implemented interactive filtering, engagement metrics analysis, and geospatial visualization with auto-generated insights.

Document Q&A System | **FastAPI, LangFlow, OpenRouter, PyMuPDF, RAG**
- Built a RAG-powered document question-answering system using LangFlow for pipeline orchestration and OpenRouter as a multi-model gateway for LLM capabilities.
- Implemented PDF upload, text extraction, and natural language Q&A with context-aware responses and session-based conversation memory.

AV Sync Detection | **Python, Deep Learning, SyncNet, Computer Vision**
- Developed a deep learning solution for AMAGI to detect audio-visual synchronization issues using SyncNet FCN architecture.
- Analyzed lip movements and audio signals to identify dubbing mismatches with frame-by-frame confidence scoring.

Leadership / Extracurricular

Treasurer, DSync Club   April 2025 – Present
- Identified and approached prospective sponsors; designed proposals, negotiated and secured support.
- Coordinated communications, managed deliverables, and led sponsor outreach for UTSAV and PHASESHIFT fests.
- Drove sponsor engagement through innovative on-campus and digital marketing activities.
- Served on organizing committees for UTSAV and PHASESHIFT, managing sponsor outreach for college fests.