

About Me - A results-driven Computer Science student (9.13 CGPA) passionate about Data Science, Computer Vision, and Generative AI. Seeking an internship to apply and expand my skills in building intelligent data-driven applications.

Projects –

- 1. AR the learning companion –**

Built an Android-based AR learning application using ARCore, Kotlin, Sceneview to improve educational engagement and concept retention.

Enabled real time 3D rendering of educational models (alphabets, anatomy) on the detected planes, enhancing user visualization.

Researched and understood about "Device Not Supported" errors by troubleshooting device-specific ARCore compatibility issues.
- 2. Digital Deception Detection –**

Developed a hybrid deep learning model using TensorFlow and OpenCV to detect digitally manipulated facial images.

Engineered a feature extraction process combining facial landmarks and frequency domain analysis to train the model.

Achieved an 78% detection accuracy on the test dataset.

Improved model accuracy by 20% by independently researching and implementing the VGG16 architecture to solve an initial performance issue.
- 3.Neuro-Sync-Avatar –**

Developed a generative AI pipeline capable of synthesizing photorealistic talking-head videos from a single static image and an arbitrary audio input.

Implemented a Wav2Lip-based architecture, utilizing a pre-trained lip-sync expert discriminator to minimize the synchronization loss between audio phonemes and visual lip movements.

Engineered a post-processing module using OpenCV and FFmpeg to stitch generated frames and merge audio streams, achieving seamless temporal consistency in the final video output.
- 4. Intelligent News Aggregator & Sentiment Analysis Pipeline –**

Developed an end-to-end python data pipeline to aggregate news from 12+ live RSS feeds using pandas and feedparser.

Trained a scikit-learn text classification model to automatically categorize articles into classes like AIML, Product launch etc.

Enriched data by engineering a sentiment analysis feature using NLTK, scoring articles from -1.0 to +1.0

Built an interactive streamlit dashboard with Plotly charts to visualize and filter articles by source, predicted category, and sentiment.

Executed a full data science lifecycle, labeling data to improve model accuracy from a 50% baseline to 74%.

Proactively expanded the project's scope by independently researching and implementing the NLTK (VADER) library

Education –


B.E in Computer Science and Engineering PDA college of Engineering	2022 – 2026 CGPA – 9.13
Pre-University Gurukul Independent PU college	2020 – 2022 Percentage – 90%

Technical Skills –

- AI & Machine Learning: Python, Tensorflow, Pytorch, Scikit-learn, Pandas, Matplotlib, Numpy.
- Computer Vision: OpenCV, Mediapipe, Image Classification, Object & Face Detection.
- Generative AI & AR/VR: Generative Models (GANs), ARCore, Sceneview, Jetpack Compose,3D object interaction.
- Tools & Database: Git, google Colab, google Cloud, Vertex AI, SQL, Hadoop.

- Generative AI & AR/VR: Generative Models (GANs), Prompt Design (Vertex AI), RAG, Gemini, Imagen, ARCore
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Certificates & Professional Development –

- Generative AI Exchange program | Google Cloud [May 2025] 
- Data Science Workshop | TechFest IIT Bombay [December 2024] 