

# Leander Francis Fernandes

Mumbai, India | leanderfdes22@gmail.com | +91 9373223587  
linkedin.com/in/leander22/ | github.com/leanderfdes | Portfolio Website

## SUMMARY

**AI Application Engineer and Full-Stack Developer** building LLM, NLP, and computer-vision systems using Python, FastAPI, and React. Implemented prompt engineering, vector-based semantic search, and REST APIs, achieving measurable improvements in accuracy, latency, and automation.

## TECHNICAL SKILLS

**Frontend:** React.js, Tailwind CSS, HTML5, CSS3, JavaScript (ES6+)  
**Backend:** Node.js, Express.js, Flask, FastAPI  
**Databases:** MongoDB, MySQL, Firebase  
**APIs and Authentication:** REST APIs, JWT  
**DevOps and Deployment:** Render, Vercel, Docker, GitHub Actions (CI/CD)  
**Programming and Data:** Python, Pandas, NumPy, Scikit-learn  
**Visualization:** Tableau, Power BI

## EXPERIENCE

### Data Analyst Intern | IBM SkillsBuild

Jun 2023 to Jul 2023

- **Processed and analyzed** datasets exceeding 100 K rows using **SQL** and **Python (Pandas, NumPy)** to improve data accuracy by **30%**.
- **Designed** interactive **Tableau dashboards** to visualize key business metrics, reducing manual reporting time by **40%**.
- **Automated** data-cleaning pipelines using **Python scripting**, increasing analysis speed by **25%**.

## PROJECTS

### LLM Playground | Full-Stack AI Application

Dec 2025

- **Built** a full-stack **LLM testing application** using **FastAPI** and **React.js** with **Google Gemini API** integration.
- **Added** Markdown rendering, streamed responses, and copy-to-clipboard utilities to reduce manual text handling by **60%**.
- **Deployed** backend on **Render** and frontend on **Vercel** using environment variables for API key isolation.  
Tech Stack: FastAPI, Python, Google Gemini API, React, Tailwind CSS, Render, Vercel

### AI-Powered Legal Intelligence System | NLP + Full-Stack Development

May 2025

- **Implemented NLP pipelines** and semantic search workflows using **Python, Flask, React**, and deep-learning frameworks.
- **Built** a legal document analysis system achieving **95% IPC prediction accuracy** and **92% case-retrieval precision**.
- **Integrated SentenceTransformer embeddings** with **ChromaDB** for Retrieval-Augmented Generation (RAG) and API serving.  
Tech Stack: Python, SentenceTransformer (NLP), ChromaDB, Gemini API, React.js, Streamlit, PyPDF2, NLTK

### Drowsiness Detection System | Real-Time Computer Vision Application

May 2024

- **Implemented** an eye-state detection pipeline using **OpenCV, dlib, and Flask**, achieving **92% accuracy** with sub-100 ms latency.
- **Built** a **React** frontend to stream 30 FPS video frames and visualize alerts in real time.
- **Added** rule-based alarm thresholds and adaptive calibration for low-light conditions.  
Tech Stack: Python, OpenCV, dlib, Flask, React.js, NumPy, Computer Vision, Real-Time Video Processing

## CERTIFICATIONS

### AI & Machine Learning (Vishlesan i-Hub, IIT Patna)

Jan 2026 – Present

Currently pursuing 9-month intensive track in Generative AI & Deep Learning.

**Other:** React Training (Internshala) | IBM SkillsBuild (Data Analytics) | Node.js (UpGrad)

## EDUCATION

### Vidyavardhini's College of Engineering and Technology (VCET), Vasai

Dec 2021 to May 2025

Bachelor of Engineering in Computer Engineering

**CGPA 7.14**

### Holy Family Convent Jr. College, Vasai

Jul 2019 to May 2021

Higher Secondary Certificate (Science)

**Percentage 90%**