ANIKET RANJAN

GitHub aniketranjan AniketRanjan

Education

Vellore Institute of Technology, Bhopal **2022 - 2026**
B.Tech – Computer Science & Engineering *CGPA -8.14*
Jusco School Kadma **2022**
12th - CBSE Board *Percentage – 83.2%*
Jusco School Kadma **2019**
10th - CBSE Board *Percentage – 90.2%*

Work Experience

Tata Steel Ltd. **Jan'25 – Feb'25**
Data & Analytics *Remote*

- Collected and cleaned 87K+ records of multi-year (2010–2020) weather data including temperature, precipitation, humidity, and wind speed for predictive modeling.
- Engineered features (seasonality, alerts, date-based) and transformed raw data to improve model performance, increasing prediction accuracy.
- Developed, tuned, and finalized regression models (e.g., Extra Trees, LightGBM) using PyCaret AutoML, achieving R^2=0.835 and MAE=1.77mm on test data.
- Deployed a Streamlit web app for real-time rainfall prediction and alert classification, with dynamic user input (latitude, longitude, or pincode).

Projects

DocDecoder (Document Analyzer) **Jan'24 – May'24**

- Developed DocDecoder, a scalable web app integrating Google Gemini API and NLP models, processing multiple document formats (PDF, PPT, TXT, IMG) for context-aware querying.
- Engineered backend architecture with microservices and FAISS indexing of 5K+ document embeddings, reducing manual document analysis time by up to 60%.
- Built a Streamlit-based front end featuring file upload, semantic search, question answering, summarization, and text-to-speech for 1K+ queries, enhancing user engagement and accessibility.
- Tools & SKills: Google Gemini API, FAISS, Pytesseract, LangChain, PyPDF2, Text-to-Speech Conversion, Tokenization

ParkEase (Smart Parking System) **July'24 – April'25**

- Led a 7-member team in designing and developing ParkEase, a scalable smart parking system leveraging CCTV, Raspberry Pi, and OpenCV, streamlining parking search and real-time space monitoring.
- Developed Python-based image processing algorithms with OpenCV for real-time detection of occupied/empty spaces, targeting high accuracy.
- Managed full project lifecycle, from task allocation to testing, with simulated concurrent user interactions and real-time performance validations.
- Skills & Tools: OpenCV, Raspberry Pi, REST API, Image Processing, Collaborations & Leadership

Skills Summary

Technical Skills: Python, CPP, HTML, CSS, JavaScript, SQL

Skills: Machine Learning, Predictive Modeling, Problem solving, Web APP Development

Language: English (Full Proficiency), Hindi (Native)

Certifications: Gen AI by IBM (April'25), Full Stack Developer MERN by SmartBridge (April'25), Cloud Computing by NPTEL (May'24)

Achievements

- **Finalist at the 2024 Industrial Conclave Project Expo** for *DocDecoder*
- **Authored *An Adventure to the Invincible Sword* at age 14**, a full-length fiction novel published globally in paperback and eBook formats on platforms like Amazon and Kindle.
- **Won the Platinum Award in IFP 2023 (Short Story Category)** among 5,000+ global entries from 30+ countries.

Position of Responsibility

- **One of the 30 students selected nationwide for KL-YES 2019–20**, a fully funded U.S. Department of State exchange program to represent India in a year-long stay and study experience in the USA.
- Member of English Literary Association, Core Member – Technical & Finance Wing. (2024-25)