ANIKET RANJAN

GitHub   aniketranjan   AniketRanjan

Education

Vellore Institute of Technology, Bhopal	**2022 - 2026**
B.Tech – Computer Science & Engineering	*CGPA -8.08*
Jusco School Kadma	**2022**
12th - CBSE Board	*Percentage – 83.2%*
Jusco School Kadma	**2019**
10th - CBSE Board	*Percentage – 90.2%*

Work Experience

Shavak Nanavati Technical Institute   **Jan'25 – Ongoing**

Machine Learning Intern   *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

- 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.
- Conducted performance testing with 10–20 concurrent users, achieving sub-3s average response time under load.

ParkEase

- 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 Summary

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

Skills: Machine Learning, Artificial Intelligence, Predictive Modeling, Natural Language Processing (NLP), AutoML (PyCaret), Feature Engineering, Model Evaluation (R^2, MAE), Streamlit, Data Cleaning & Preprocessing, Semantic Search, Text Summarization, Project Management, Market Research and Analysis, Market Segmentation, Leadership, Effective & Technical Communication

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

Certifications: Gen AI by IBM (April'25), Full Stack Developer MERN by SmartBridge (April'25), Marketing Analytics by NPTEL (May'25), Cloud Computing by NPTEL (May'24), Bits and Bytes of Computer Networking by Coursera (Jan'23)

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)