Narayan Prasad Das

narayanpdas2004@gmail.com | Kaggle | Github | Twitter | Linkdin

EDUCATION

Odisha University Of Technology and Research — Bhubaneswar, Odisha
Bachelor of Technology in Mechanical Engineering — *Nov. 2022 – Present*

EXPERIENCE

Vocational Training Programme — June 2025 – July 2025
HAL(Hindustan Aeronautics Limited) — *Koraput Division*
- Studied End to End Manufacturing of Jet Engines.
- Made a Full Report on the Air System in Aero Engines diving deep into the various use of air inside an Aerospace.
- Learned how optimized systems are designed.

PROJECTS

HI Docs | *Langchain, FastAPI, React, SQLite, ChromaDb* — August 2025 – Present
- Developed a full-stack web application using with FastAPI serving a REST API(also Websockets) with React(Chakra UI) as the frontend
- Implemented a LangChain RAG Engine to chunk-embed-retrieve and generate Response
- Used various optimization techniques like Query Decomposition (By Fine-Tuning a BART model), Query Routing for both speed and Accuracy.
- Used Sqlite with ChromaDb for data and vector storage.

Text Classifier | *Tensorflow, pandas, Sklearn* — Jun 2025 – Sep 2025
- Ensembled and Fine Tuned Deep learning Models to Predict how close a text is to a source text.
- Achieved a score of 91 accuracy with global ranking of 61.
- Explored Various NLP Pre-processing, Augmentation and visualization Techniques.

From Scratch | *Pytorch, numpy, Sklearn* — Oct 2025 – present
- An ongoing research project to implement and verify core deep learning architectures using only Python and NumPy, demonstrating a first-principles understanding of model mechanics.
- Implemented a fully-connected Neural Network from scratch in NumPy, including full backpropagation and vectorized gradient descent.
- Exploring Various Optimization Techniques while reading Research Papers and moving towards advance architectures like transformers.

TECHNICAL SKILLS

Languages: C/C++,Python, SQL, Typescript
Frameworks: Langchain, FastAPI, Tensorflow, React
Developer Tools: Git, Github
Libraries: Scikit-Learn, Pandas, NumPy, Matplotlib
Competition Profile : Rank 61 in a Kaggle competition,Leetcode(Max Rating:-1528), Codeforces(Max Rating:-1293,Pupil), Codechef(Max Rating:-1676,3 Star)