Ankit Sajwan

Experience

Data Scientist JPMorganChase Bengaluru, Karnataka Apr 2023 – present

• LLM Based Financial Chatbot (Ongoing): Developed a GPT-40 based Q&A chatbot leveraging a transformer-based Retrieval-Augmented Generation (RAG) pipeline and chain-of-thought prompting. The system understands question intent, automatically generates JSON payloads to dynamically retrieve data from Essbase (a multidimensional database), generate Python code to perform calculations and produce accurate, data-driven visualisations & responses. For example, it can handle conversations like: "How much has net interest income grown year-over-year in Q4 2024?", "Can you show the quarterly trends for 2023–2024?"

• Transformers Based Web Search Engine: Developed a web-based search engine to efficiently direct users to the most relevant dashboard. Built a fast and efficient retrieval system using small, lightweight fine-tuned transformer models (bi-encoder and cross-encoder) to fetch and re-rank top candidates with context-based precision. Combined results with lexical search (BM25) using a weighted score aggregation, achieving an average query response time of 2-3 seconds.

Data Scientist

Delhi (Remote)

Jan 2021 - Apr 2023

Tata Communications

• Deep Learning Based Network Traffic Anomaly Detection: Developed a full-scale, deep learning-based anomaly detection system for high-volume network traffic data (1.5TB/month) by conducting GPU-accelerated training of a Variational Autoencoder (VAE) model using the PyTorch framework, and establishing robust data ingestion, training, and real-time inference pipelines—resulting in a 60% reduction in false positives for DDoS detection compared to the baseline system.

NLP Engineer

Pune, Maharastra Aug 2018 – Dec 2020

Eaton

• NLP Driven Digitization of scanned PDF reports: Built a NLP-driven automated digitization pipeline using Python to extract and parse data from 1,000 scanned PDF test reports, then stored and managed the information in a MySQL database—reducing the assessment turnaround time of new product requirements by 90% and eliminating the workload equivalent to 2 FTEs.

Education

Indian Institute of Technology Kharagpur (IIT-KGP)

May 2016 - May 2018

Masters of Technology (M. Tech) in Mechanical Systems Design

- o GPA: 9.05/10.0
- o Internship at Siemens PLM (Duration-1 year). Feature development for Siemens NX CAD software using C++

JSS Academy of Technical Education, Noida

May 2012 - May 2016

Bachelor of Technology (B. Tech) in Mechanical Engineering

- o Grade: 70%
- GATE-2016. Secured an All-India Rank of 678, placing in the top 99.7 percentile.

Achievements

Kaggle Competitions Expert

• Reached Kaggle Competitions Expert Tier with two solo silver medals in deep learning competitions.

Kaggle Silver Medal in NLP competition

Leaderboard Link

 $\circ\,$ Ranked 62nd out of 1,621 teams in a Toxic Comment Classification Competition.

Kaggle Silver Medal in Computer Vision competition

Leaderboard Link

• Ranked 103rd out of 3,308 teams in Melanoma Classification Competition.

Technical Skills

Languages & Databases: Python, SQL, ClickHouse, Mongo, Qdrant (Vector DB), Chroma (Vector DB)

Technologies: PyTorch, HuggingFace, OpenAI, LLMs, LangChain, RAPIDS, Chainlit, Streamlit, Llama

Developer Tools: Git, Docker, VS Code, AWS, Linux CLI