Mini Agarwal

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EDUCATION

Techno Main Salt Lake   Kolkata, India
B.Tech in Computer Science and Engineering — CGPA: 9.22 / 10   *Aug 2019 – Aug 2023*

EXPERIENCE

Tech Mahindra Ltd   Mar 2024 – Present
Associate Software Engineer   *Kolkata, India*

- Optimized Vue.js frontend modules and automated CI/CD pipelines, reducing system response time by 40% and deployment errors by 25%.
- Engineered an internal RAG application using Mistral 7B to automate policy queries, reducing manual lookup time by 75% and eliminating handbook searches.
- Mitigated LLM hallucinations by refining retrieval parameters and prompt constraints, significantly improving response accuracy in a resource-constrained environment.
- Architected a secure on-premise deployment via SSH tunneling on client VM, ensuring strict adherence to enterprise data privacy standards.

Humming Bird Web Solutions Pvt Ltd   Sept 2023 – Dec 2023
Software Developer Trainee   *Pune, India*

- Focused on UI optimization and mobile responsiveness for better user experience. Collaborated with cross-functional teams in Agile sprints using Jira and GitHub.

PROJECTS

Document RAG Assistant ⬀ | *Python, LangChain, Hugging Face, Streamlit, Groq, FAISS*   Aug 2025

- Built end-to-end RAG chatbot enabling question-answering from uploaded PDFs using LangChain, FAISS vector search, and Groq LLM with SentenceTransformer embeddings
- Implemented dynamic chunking strategies to optimize the trade-off between retrieval accuracy and inference speed and deployed on Streamlit Cloud.

Customer Churn Predictor ⬀ | *Python, Pandas, Scikit-learn, Matplotlib, Streamlit*   June 2025 – July 2025

- Built a churn prediction model using Logistic Regression and random forest (Best AUC: 0.80)
- Handled class imbalance using class weights, improving recall from 52% to 77%
- Performed full EDA, feature engineering, and one-hot encoding.
- Developed and deployed a Streamlit web app for real-time churn predictions

News Scraper | GitHub Repo | *Python, BeautifulSoup, Pandas, MySQL, schedule, Docker*   April 2025 – May 2025

- Developed automated ETL pipeline that extracts 100+ live BBC headlines, transforms unstructured text data, and loads processed results into MySQL database with scheduled execution every 12 hours.
- Data transformation using Pandas for text cleaning, deduplication, feature extraction (word count, length metrics), and data validation ensuring high data quality.
- Containerized entire pipeline using Docker with docker-compose configuration, enabling consistent deployment across environments and simplified dependency management.

TECHNICAL SKILLS

Languages: Python, SQL, JavaScript, Java
Libraries and Frameworks: Pandas, Numpy, BeautifulSoup, Matplotlib, scikit-learn, Hugging Face, LangChain, Keras, TensorFlow, FAISS
Tools: GitHub, Docker, Jira, Tableau
CS Concepts: Data Structures and Algorithms, OOPS, DBMS, OS, Linux
Cloud and database: AWS , Docker, MySQL

CERTIFICATION

AWS Certified Cloud Practitioner ⬀
Valid: Feb 2025 – Feb 2028