Naib Mohammad Althaf *Machine Learning Engineer*

naibalthaf@gmail.com 9704077035 Bengaluru https://github.com/naib1999/my-projects

PROFESSIONAL SUMMARY

Data Scientist with 3+ years of experience designing and deploying machine learning and AI solutions, including chatbots, RAG pipelines, and predictive analytics. Proficient in Python, SQL, Azure Databricks, and MLflow, with expertise in NLP, deep learning, and model explainability. Passionate about building scalable, ethical, and impactful AI systems for real-world problems.

SKILLS & TECHNOLOGIES

- **Languages & Tools**: Python, SQL (DQL, DML, DDL, DCL), Git, Azure Databricks, Hadoop.
- **Machine Learning**: scikit-learn, Decision Trees, Regression, Model Evaluation.
- **Deep Learning & NLP**: TensorFlow, PyTorch, Neural Networks, RNNs, GPT APIs, LangChain.
- **Data Handling**: Pandas, NumPy, Data Cleaning, Feature Engineering, EDA, Matplotlib, Seaborn.
- **Big Data & Cloud**: Azure, Hadoop, MLflow, MLOps, Model Deployment.
- **Concepts**: Retrieval-Augmented Generation (RAG), XAI (Explainable AI), Agile.

WORK EXPERIENCE

Machine Learning Engineer 2022 – present
TATA CONSUTANCY SERVICES

- **AI-Powered Chatbot for Designers:** Developed and deployed a **chatbot using Retrieval-Augmented Generation (RAG)** to assist designers by providing best practices and key insights, reducing manual searches and improving efficiency. Trained the model on extensive best practices data and other critical design-related information. Utilized **Azure Databricks** for model deployment and scalability.
- **Workflow Optimization:** Monitored design processes and collaborated with leads and designers to identify operational challenges and streamline workflows.
- **Tool Development:** Created a Python-based connector pin assignment tool that cut electrical design workflow time from 6 hours to 1 hour, reducing errors and increasing productivity.
- **Data-Driven Enhancements:** Utilized data analytics to measure key performance indicators, resulting in a 20% improvement in on-time project delivery.

PROJECTS

Domain-Specific Sentiment Analysis for Renewable Energy Tweets

- Developed an NLP-based sentiment analysis model to classify tweets on renewable energy into positive, negative, or neutral categories.
- Leveraged combination deep learning algorithms to provide insights into public sentiment, aiding industry stakeholders in trend analysis.

EDUCATION

M.Tech Data science 2022 – 2024
Energy Institute of Bangalore Bangalore, India
CGPA: 9.3

Bachelor of Technology(Mechanical Engineering) 2017 – 2021
B.S Abdur Rahman crescent institute of scienece and technology Chennai, India
CGPA: 8.0

ACHIVEMENTS

- Recognized at TCS for innovative tooling and chatbot integration in design teams.
- Merit based Scholarship of Six lakhs Forty Thousand Awarded by Crescent Institute for under Graduate Studies.