Sheikh Md. Samiul

Computer Science and Engineering Graduate

Summary

As a recent Computer Science and Engineering graduate specializing in AI, particularly in Machine Learning and Natural Language Processing (NLP), I have developed AI-powered applications and honed my skills in Python, SQL, and machine learning frameworks. With a strong foundation in web and mobile application development, I am a quick learner and passionate problem solver eager to contribute to the tech industry

Education

Bachelor of Science in Computer Science and Engineering

2019-2024

North South University

CGPA: 3.01/4.00

Dhaka, Bangladesh

 Relevant Coursework: Software Engineering, Pattern Recognition, Machine Learning, Natural Language Processing, Database Management System.

Projects

Educational Content Enhancement Using LLMs | Python, Hugging Face, Groq API, LangChain, Streamlit.

- Developed a web application that integrates Llama 3.1 to modify educational PDFs for enhanced engagement.
- Modifies the document right after upload as per the user learner type.
- Integrated conversational Retrieval-Augmented Generation (RAG) to facilitate interactive learning and comprehensive document understanding.
- Quiz generation from the content and instant evaluation system using the LLM.

Summarization and Question Answering Tool with T5 Models | Python, Hugging Face, PyTorch, Flask.

- Developed a web app for text summarization and question answering by fine-tuning T5 models separately for both tasks.
- For both tasks, implemented efficient pipelines for data preprocessing, model training, and evaluation, ensuring high accuracy and performance.

Car Price Predictor for Used Cars | Python, Scikit-learn, Pandas, Matplotlib, Seaborn, Streamlit.

- Built a machine learning system to predict the selling prices of used cars, applying robust exploratory data analysis (EDA) and preprocessing techniques.
- Addressed data challenges, including categorical variables and missing values, and engineered features to enhance model performance.
- Trained, evaluated, and compared multiple models, delivering a comprehensive pipeline for prediction and deployment.

Customer Churn Prediction System | Python, Scikit-learn, Pandas, Seaborn, PyCarat

- Developed a machine learning system to predict customer churn based on historical data.
- Conducted data preprocessing, feature engineering, and exploratory data analysis (EDA).
- Analyzed best performing models and optimized performance using PyCarat.

Key Skills

- **Programming Languages:** Python, SQL, Java, C, C++, Assembly
- **Al/Machine Learning Frameworks and Libraries:** PyTorch, Hugging Face Transformers, Scikit-learn, Vision Models, Language Models
- Data Visualization: Pandas, NumPy, Tableau, Matplotlib, Seaborn
- Web Development: HTML, CSS, JavaScript, Flask, Streamlit
- Version Control: Git & GitHub
- Database Management: Firebase, Snowflake, SQL, NoSQL
- Soft Skills: Problem-solving, Team Collaboration, Critical Thinking