Sheikh Md. Samiul

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Summary

Recent Computer Science and Engineering graduate specializing in AI, particularly Machine Learning and Natural Language Processing (NLP). Experienced in developing AI-powered applications, proficient in Python, SQL, and machine learning frameworks. Strong background in database management, web, and mobile app development. Passionate about leveraging AI to solve real-world problems and eager to contribute to innovative teams working on cutting-edge AI solutions.

Education

Bachelor of Science in Computer Science and Engineering **2019-2024**
North South University *Dhaka, Bangladesh*
CGPA: 3.01/ 4.00

- Relevant Coursework: Pattern Recognition, Machine Learning, Artificial Intelligence, Natural Language Processing, Database Management System.

Projects

Educational Content Enhancement Using LLMs | Python, FastAPI, 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 Transformers, 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
- **AI/Machine Learning Frameworks and Libraries**: PyTorch, Hugging Face Transformers, Scikit-learn, Vision Models, Language Models
- **Data Visualization**: Tableau, Matplotlib, Seaborn
- **Natural Language Processing Toolkits:** NLTK, SpaCy
- **Version Control:** GitHub
- **Database Management:** Firebase, SQL, MySQL, NoSQL
- **Soft Skills:** Problem-solving, Team Collaboration, Critical Thinking