Mohammad Mahmud

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EDUCATION

Hunter College, City University of New York (CUNY)

Bachelors of Arts in Computer Science

<u>Relevant Coursework</u>: Data Structures, Algorithms, Database Management, Data Mining, Software Analysis and Design, Operating Systems, Web Development, Project Management

SKILLS _

PYTHON, JAVA, AWS, SQL, DATA ANALYTICS, DEEP LEARNING, TABLEAU, JIRA, QA AUTOMATION TESTING, GIT AGILE, SCRUM, SPRINT PLANNING, ROADMAP DEVELOPMENT

EXPERIENCE _

Data Analytics Fellow - COOP, Hybrid

Jan 2025 - Present

- Cleaned and preprocessed structured and unstructured data to improve data quality for machine learning models
- · Conducted exploratory data analysis to identify patterns, trends, and outliers in large datasets using Python
- · Automated data extraction, transformation, and loading (ETL) processes using Python and SQL

Software Engineering Resident - HEADSTARTER AI, Remote

Nov 2024 - Present

- · Led 14+ Al and full-stack projects, managing end-to-end product development with Agile methodologies
- $\bullet \ \mathsf{Managed} \ \mathsf{project} \ \mathsf{timelines}, \ \mathsf{sprint} \ \mathsf{planning}, \ \mathsf{and} \ \mathsf{backlog} \ \mathsf{prioritization} \ \mathsf{in} \ \mathsf{an} \ \mathsf{Agile} \ \mathsf{software} \ \mathsf{development} \ \mathsf{team}$
- Developed and deployed **Brain Tumor Classification**, an Al-powered health diagnostics tool

Data Analyst Intern - EXTERN BEATS BY DRE, Remote

Aug 2024 - Oct 2024

- Automated data extraction and transformation pipelines, reducing reporting time and enhancing workflow efficiency
- Processed and cleaned large datasets from multiple sources, improving data accuracy
- · Analyzed interview data and survey results to create detailed reports, highlighting strategic opportunities

Software Engineering Intern - CITY SCIENCE, Hybrid

June 2024 - Nov 2024

- · Conducted data cleaning, manipulation, and visualization using SQL, Python (Pandas, NumPy), and Tableau
- Processed and cleaned large datasets from multiple sources, improving data accuracy
- Extracted, transformed, and loaded (ETL) large datasets from multiple sources for exploratory and predictive analysis

AI PROJECTS ___

Customer Churn Prediction with Machine Learning

Nov 2024 - Present

- Developed and optimized multiple machine learning models to predict customer churn, achieving up to 85% accuracy.
- · Utilized XGBoost, Random Forest, Decision Tree, and GaussianNB to select the best model
- Evaluated models based on precision, recall, and accuracy to select the best performing algorithm
- Built an interactive web application using Python and Streamlit to analyze individual customers churn predictions

GitHub AI Review Agent with OpenAI

Nov 2024 - Present

- Contributed to Al-powered GitHub agent that code reviews, generates feedback, and suggests improvements
- · Utilized OpenAI models to improve the review by providing more context-aware, accurate feedback for pull requests
- · Integrated NGROK for secure webhook communication, for reviewing pull requests in real-time
- · Improved the Python parser to help the AI interpret and evaluate code functionality more effectively

Codebase RAG - AI for Code Understanding

Nov 2024 - Present

- Developed an Al-powered assistant to interact with and analyze a codebase, leveraging RAG to provide expert insights
- · Implemented a web application using Streamlit to interact with codebase and answer user gueries
- Integrated a feature to switch between different codebases, providing flexibility for projects with multiple repositories
- · Utilized frameworks including Python, Grog, and Pinecone database for seamless integration and performance

CERTIFICATIONS _____

AWS Certified Solution Architect - Associate Google Data Analytics Certification In Progress, Expected April 2025
In Progress, Expected March 2025