Mohammad Sami Nur Islam

https://github.com/Sami6720 Rersonal Website

Education

McGill University, Computer Science and Mathematics

Sep 2021 - Apr 2024

Second-year undergrad with an expected graduation date of April 2024.

Recipient of the prestigious Hugh Brock scholarship (a renewable scholarship worth \$5000 per annum given to exceptional entering undergrads)

Completed an Introduction to Statistical Computing Course (MATH 208) ☑ in R (Grade: A)

Skills

Programming Technologies (Python, Java, C, C++, JavaScript, React, Bootstrap, Express, MongoDB, MySQL, Github, Git)

Statistical Analysis (R)

Machine Learning (NumPy, Pandas, Scikit-learn, Streamlit, Rasa)

Work Experiences

Software Developer Intern (Part time), *IntelsenseAl* ☑

Sep 2022 – Feb 2023 | Remote

- Building a new restaurant chatbot product prototype using the **Python-based RASA** framework.
- Researching and consolidating appropriate datasets for the chatbot.
- Implementing the backend for the chatbot using MySQL and Express.

Software Developer and Data Science Intern, Shikhbe Shobai

Jun 2022 – Aug 2022 | Dhaka, Bangladesh

- Built a data visualization dashboard (using **Streamlit** and **React**) analyzing around **8000** user data.
- Wrote data-wrangling scripts with the **Pandas** and **Scikit-learn** libraries and visualization scripts with the **Matplotlib** library.
- Created a simple regression model using the **Scikit-learn** library to predict the total future revenue from each new user.
- Conducted a market segmentation analysis from the user data and collaborated with the marketing team on their strategy.
- Built a task management system (with user authentication) into the dashboard using React, Express, and MongoDB.
- Built an automated form recognizer system using **AWS's** form recognizer API and Streamlit, improving the processing time of paper registration forms by 600%.

Projects

Wallstreet-sentiments Mar 2022 – Apr 2022

- Conceived the idea and then collaborated with two to build a web app (in **Streamlit**) that predicts the likely direction of the price of the most popular stocks on the r/WallStreetBets subreddit by combining sentiment analysis of comments and posts with fundamental analysis of P/E ratio, market cap, etc.
- Prepared the training data set by consolidating key metrics of relevant popular stocks and cleaning them using the **Pandas** library.
- Designed and coded in **Python** the algorithm for the fundamental analysis of relevant stocks. The script works by fetching data from TDAmeritrade API, cleaning it, and then running the cleaned dataset through a random forest classifier using the **Scikit-learn** library.

Built a neural network from scratch

Oct 2021 – Dec 2021

- Used only the **NumPy** and **SciPy** libraries to build a simple three-layer neural network.
- Tested the neural network on the MNIST data set with **97%** accuracy.
- Bettered my understanding of backpropagation, gradient descent, activation functions, and ways to improve the accuracy of this prediction.

Leadership and Extracurriculars

Trainee, MAIS 202: Accelerated Introduction to Machine Learning Program

Jan 2022 – Apr 2022 | Montreal

- Selected as one of the top 20 amongst more than 120 students to be part of this introduction to Machine learning program 🛭 .
- Completed a capstone project (Wallstreet-sentiments) and presented it at the McGill AI project fair.

Scholastica International Mathematics Summit, President ☑

Dec 2019 – Aug 2020 | Bangladesh

- Conceived the idea to organize Bangladesh's first international high school mathematics competition, where ultimately 1000 participated, including 200 international students.
- Interviewed, recruited, and oversaw the day-to-day operations of an 80-member, seven-department organizing committee.

Tutor, McGill Computer Science Undergraduate Society Helpdesk

Jan 2023 - Apr 2023

• Will be assisting fellow undergrads with homework problems and understanding course concepts.