Md. Fahmid-Ul-Alam Juboraj

Work Experience

Solutions Support Manager

May 2023 - Nov 2023

At **Banglalink**, **ICT Division**, I am actively engaged in research-oriented initiatives for ICT products. My role involves managing ICT products and conducting in-depth research to optimize their performance. I serve as a bridge between technical and non-technical stakeholders, including business partners, and my efforts in research have led to efficient issue resolution and improved operational performance. This approach has significantly enhanced operational efficiency and elevated customer satisfaction levels.

Student Tutor 2022

Provided academic assistance to diverse groups of students at **BRAC University**, **School of Data and Sciences** to enhance subject comprehension, boost confidence, and develop learning skills. Collaborated with faculty and students to address weaknesses and prepare for exams. Conducted remote tutoring sessions and group discussions to foster critical thinking skills.

PUBLICATIONS

Moni, Md. Moynul Asik et al. (2022). "Comparative Analysis of Process Scheduling Algorithm using AI models". In: 2022 25th International Conference on Computer and Information Technology (ICCIT), pp. 587–592. DOI: 10.1109/ICCIT57492.2022.10055395.

RESEARCH

- 1. AI Based Cloud Failure Detection And Prevention Algorithm (2023). Innovations in Power Advanced Computing Technologies -2023, VIT, accepted
- 2. A Conceptual Framework of an Automated Mosquito Control in Drainage Systems for Combating Dengue in Bangladesh ICCIT, 2023, accepted
- 3. Bangladesh Water Body-IoT Monitoring System With Usage Suggestions and Statistical Analysis Of Results WIECON 2023, accepted
- 4. Brain Tumor Classification on MRI Images with Big Transfer and Vision Transformer: Comparative Study, Collaborations with MIST CSE dept.Status: Under Review
- 5. Automatic Bangla Speech Recognition Status: In Progress
- 6. Implementation Of Origami-Style In Mars Engineering , Authors: Suhail Rafi and Md. Fahmid-Ul-Alam Juboraj , [Link] , Page: 45
- 7. Analysis of Air Quality with ML models in Dhaka and its Health impact, Status: In Progress
- 8. Detect Multiple Rice Disease Using EfficientNet+VIT, Status: In Progress
- 9. A proposed Quantum Hypermixer , Authors: Md. Fahmid-Ul-Alam Juboraj and Rabiul Islam Khan , Status: Under review
- 10. A QML approach for botnet and intrusion detection system , Authors: Md. Fahmid-Ul-Alam Juboraj and Rabiul Islam Khan , Status: In propgress

Undergraduate Thesis

"Comparative Analysis of Process Scheduling Algorithm using AI models" (2022). published in ICCIT.

DATA SCIENCE PROJECTS

1. Air-lines Tweet Analysis

Developed and hosted a sentiment analysis web app on Streamlit Cloud to analyze customer experiences and ratings of different airlines using data analysis and visualization tools. [Link]

2. Geospatial Climate Imaging Analysis

Developed a project in Python using Xarray to visualize, manipulate, and perform operations on geospatial multidimensional data, with a focus on exploring temperature, vegetation density, and total precipitation data over the Brazilian Amazon from 1979-2019. [Link]

3. BRAC Stocks Prediction

Performed an analysis on the historical and news data of Brac Bank stock using time series fore-casting techniques, allowing for accurate predictions of future stock performance. [Link]

4. Financial CAPM Analysis

Developed Capital Asset Pricing Model (CAPM) for various stocks through financial analysis and data analysis techniques, providing insights into the expected return on investment based on market risk and other factors. [Link]

5. Analyzing Sales Data for the Retail Company

Conducted Exploratory Data Analysis (EDA) on sales data for a retail company to gain insights into customer behavior and preferences, informing strategic decision-making. [Link]

6. COVID-19 Data Analysis

Analyzed COVID-19 and happiness datasets to explore the relationship between happiness and pandemic outcomes in Bangladesh and neighboring countries. [Link]

7. Tumor Diagnosis with EDA

Performed EDA on Breast Cancer Diagnostic data from UCI ML Repository to detect patterns in cell nuclei features and develop a linear programming discrimination model for breast cancer diagnosis. [Link]

8. Cervical Cancer Prediction

Built and trained an XG-Boost classifier to predict cervical cancer risk using data from 858 patients, identifying key risk factors such as HPV infection and weakened immune systems. [Link]

9. Bangladesh Water Bodies Analysis

Conducted statistical analysis, including hypothesis testing and t-tests, on water quality data collected from IoT sensors across multiple lakes in Bangladesh, along with data visualization. [Link]

10. Sentiment Analysis with BERT

Conducted sentiment analysis using BERT to classify large volumes of text data. [Link]

11. Question Answer Bot

Developed a question-answering chatbot using NLTK and Newspaper3k libraries in Python that can answer any question from a given Wikipedia link, showcasing proficiency in NLP and web scraping. [Link]

12. General Social Survey Data Analytics Web-App

Created a web app for analyzing correlations between education, income, and happiness using GSS data. [Link]

13. CityBike Trip Analysis with Tableau

Developed a comprehensive analytical dashboard for visualizing cityBike trip data using Tableau. [Link]

14. Analysis of Sales Data Using RFM Model with SQL and Tableau

Utilized SQL for RFM analysis on sales data, deriving customer segmentation insights, and leveraged Tableau for visualizing the findings, enabling data-driven decision-making in sales strategies. [Link]

15. Customer Behavior Analysis

Analysis of customer behavior and purchase insights project report. [Link]

16. Covacure Database

Designed a corona vaccine database management system for efficient distribution and tracking.

[Demo Link]

SKILLS

- Python frameworks like Django, Flask and Fast API for web development
- Python frameworks like Beautiful Soup, Scrapy, Requests, Selenium, Lxml for webscraping
- Matplotlib, Seaborn, Plotly, Pandas, Numpy for data analysis and visualization
- scikit-learn, TensorFlow, PyTorch, Keras, XGBoost for data science and machine learning.
- MySQL, Tableau, Microsoft Excel.
- Basics of DevOps and Cloud and experienced in Docker.
- Java, Bash and Shell Scripting
- Git and Github

Competitions

• **Kaggle competitions** Ranked 13th in the ML Olympiad - Into the Space competition organized by TFUG Dhaka on Kaggle in 2023 with 79.331 accuracy Link

CERTIFICATIONS

- Data Analyst Track Certificate by 365 Data Science
- Business Analyst Career Track by 365 Data Science
- Data Scientist Track Certificate by 365 Data Science
- DevOps Pre-Requisite Course by KodeKloud

EDUCATION

M.Sc - BRAC University- Ongoing

B.Sc- Completed 136 out of 136 credits of Computer Science and Engineering at **BRAC University** with CGPA **3.84**

H.S.C - Notre Dame College GPA - 5.00

S.S.C - Dhaka Residential Model College GPA - 5.00

References

Tasfin Mahmud

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Md Ramim Tanver Rahman

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