Tahsinul Haque Dhrubo

Data Scientist

EDUCATION

2020 - 2024

B.Sc., BRAC University, Computer Science.

Thesis title: Bridging Worlds: Enhancing Low-level Sign Language Recognition and Seamless BdSL-to-Bengali Conversion with Sequential LSTM Innovation

SKILLS

Programming Languages

Python, **JavaScript**, **TypeScript**, Go, Java ,C++, NodeJS, Ruby on Rails

Machine Learning and AI

■ TensorFlow, Keras, PyTorch, Scikit-learn, Numpy, Pandas, Matplotlib, Mediapipe, OpenCV, YoloV5, Seaborn

Databases

MySQL, PostgreSQL, MongoDB, Prisma

Web Development

HTML, CSS, ReactJS, Tailwind CSS, NextJS, Flask, FastAPI, Django, PHP

Operating System

Windows, Kali Linux

Academic

Academic Research, Teaching, LateX

Others

Git, Docker, Selenium(Automation), Kafka

EXPERIENCES

Sep 2024 - Running

Jr. Data Scientist, Inteliweave Ltd.

MY RESEARCHES

Bridging the Communication Gap: A Custom Transformer Encoder Stack Model for Bangladeshi Sign Language Translation

• Developed a Custom Transformer Encoder Stack Model to bridge the communication gap between hearing individuals and the deaf, achieving high accuracy in translating Bangladeshi Sign Language (BdSL) and advancing NLP techniques for improved sign language interpretation.

BengaliBot: Bridging Language Barriers with AI-driven Conversations | GitHub | ACM

- An offline system designed to understand and respond to human queries in Bengali. This project allowed me
 further to explore the intricacies of Deep Learning and NLP, solidifying my desire to advance in Artificial
 Intelligence.
- Accepted for Publication in International Conference on Computing Advancements 2024 (ICCA) and selected for ACM Publication

Bridging Worlds: Enhancing Low-level Sign Language Recognition and Seamless BdSL-to-Bengali Conversion with Sequential LSTM Innovation | \underline{GitHub} | \underline{ACM}

- Developed a model translating Bengali Sign Language into readable Bengali text. This project involved creating our dataset and utilizing technologies like Mediapipe, LSTM, and OpenCV, which has been a testament to my passion for creating adaptable and impactful technological solutions.
- Accepted for Publication in International Conference on Computing Advancements 2024 (ICCA) and selected for ACM Publication

Securing the Pharmaceutical Supply Chain Using Blockchain

• Hyperledger Fabric to secure supply chain information and AI to detect fraud, aiming to create a transparent and accountable system. This project highlighted the potential of combining blockchain and AI to solve real-world problems, achieving 293 reads and a 4.4 research interest score on ResearchGate.

TECHNICAL PROJECTS

TaskList | GitHub

- Developed a website with Go in the backend and NextJS in frontend
- Created for a job assessment. Click here to visit

Chakri Khujo - Job Posting Website | GitHub

- Made for job search and posting
- · MERN Stack

SoloNest | GitHub

- · Django and Tailwind CSS
- Implemented payment gateway

Predicted Routine | GitHub

- Developed with Selenium and FastAPI
- To ease students' pressure

Controller with Socket Programming | GitHub

- Made with Python
- Control System for a rover

AWARDS & ACHIEVEMENTS

International

2025	C 1 6 D 1	C 111 / 35 /	CTD D	TT+ 1
2025	Codeforces Rank:	Candidate Master.	IID- Programmers	Hivel

- 2023 **I** 100 Problems solved on LeetCode. [ID- Exile404]
- 2022 | 3rd Kibo Robot Programming Challenge (Kibo-RPC) [Won Crew Award]
- 2021 **and Kibo Robot Programming Challenge (Kibo-RPC) [Runners-up][Won Crew Award]**
 - **■** Honorable Mention in ICPC2021

National

2024	Finalist in Robi Datathon 3.0 powered by AWS
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- 2022 Finalist in Bangladesh Blockchain Olympiad 2022
- 2021 RAC University Intra University Programming Contest 2021 (Champion)
 - **■ BRAC** University Intra University Hackathon [Runners-up]

INTEREST & HOBBY

Interest Learning new Programming Language and Tech, Research and Analysis

Hobby Reading Books, Gaming

REFERENCES

- Dr. Md. Golam Rabiul Alam, Professor, Email: rabiul.alam@bracu.ac.bd
- Dr. Farig Yousuf Sadeque, Associate Professor. Email: farig.sadeque@bracu.ac.bd
- Dr. Muhammad Iqbal Hossain, Associate Professor. Email: iqbal.hossain@bracu.ac.bd