## **Tahsinul Haque Dhrubo**

Software Engineer

tansind: maque: am aboegmat: com

this://th-dhrubo-portfolio.vercel.app

Exile404

## **CARRER OBJECTIVE**

Looking ahead, I am eager to explore how Machine Learning, Deep Learning, and AI can be applied to solve complex, real-world problems, particularly those that have been traditionally overlooked due to technological limitations. My goal is to contribute to research that not only pushes the boundaries of what Machine Learning, Deep Learning, and AI can achieve but also ensures that these advancements are inclusive and beneficial to society at large.

## **EDUCATION**

2020 - 2023

**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

in Tahsinul Hague Dhrubo

## **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 Research, Teaching, LateX

## **EXPERIENCES**

Jan 2023 - Jan 2024 Full Stack Developer, TNC Global Ltd

Mar 2020 - Nov 2022 **Director of Communications**, BRAC University Response Team

Oct 2020 - Mar 2022 Senior Member (Control and Sofware), BRACU Mongol Tori

## **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.

#### Bengali AI Chatbot | GitHub

- 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)

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

- 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)

### 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 276 reads and a 3.9 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

## E-Ticketing | GitHub

- Made for Bus, Train, and Plane
- Made with HTML, CSS, Javascript & PHP

## Controller with Socket Programming | GitHub

- · Made with Python
- Control System for a rover

## **AWARDS & ACHIEVEMENTS**

- 2024 Finalist in Robi Datathon 3.0 powered by AWS
- 2023 **ID-Exile404**
- 2022 Srd Kibo Robot Programming Challenge (Kibo-RPC) [Won Crew Award]
  - Finalist in Bangladesh Blockchain Olympiad 2022
- 2021 and Kibo Robot Programming Challenge (Kibo-RPC) [Runners-up] [Won Crew Award]
  - BRAC University Intra University Programming Contest 2021(Champion)
  - **■ BRAC** University Intra University Hackathon[Runnersup]
  - **Honorable Mention in ICPC2021**

## **REFERENCES**

- Dr. Farig Yousuf Sadeque, Associate Professor. Email: farig.sadeque@bracu.ac.bd
- Dr. Muhammad Iqbal Hossain, Associate Professor. Email: iqbal.hossain@bracu.ac.bd