# Tahsinul Haque Dhrubo

**Software Engineer** 

# **CARRER OBJECTIVE**

I am a software engineer passionate about machine learning, data science, and AI and eager to develop innovative, data-driven solutions to real-world problems. I aim to blend software engineering expertise with advanced analytics and AI to create impactful applications that drive meaningful change and benefit society. I strive to work with a dynamic team to push technological boundaries while ensuring ethical and inclusive advancements.

## **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**, AIDocBuilder Inc.

Jan 2023 - Jan 2024

Full Stack Developer, TNC Global 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.

# 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 | <u>GitHub</u>

- 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

### Controller with Socket Programming | GitHub

- · Made with Python
- Control System for a rover

#### **AWARDS & ACHIEVEMENTS**

## International

2023	100 Problems solved on LeetCode. [ID- Exile40	ит
2023	TOU Problems solved on LeetCode. 11D- Exheau	<i>)</i> 41

- 2022 Ard 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

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