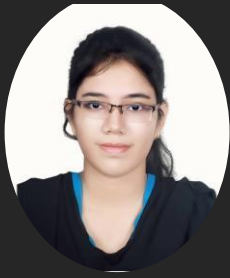


Mahira Jalisha



I am a data science enthusiast and an aspiring machine learning practitioner with core interest in deep learning. My current interest lies in the fields of Computer Vision, Natural Language Processing and ML Ops. I prioritize learning and doing projects that enhances my knowledge and skills. Aiming to constantly improve myself to become proficient in my craft and exceed my personal goals.

Skills:

Technical skills:

- Programming Language: Python, SQL, C++, C, Javascript
- Familiar with data analysis with python, working with large datasets, machine learning and deep learning.
- Have experience working with Pytorch and Tensorflow.
- Basic knowledge of Flask, FastAPI and mqtt.
- Operating System: Linux(Ubuntu), Windows
- Have experience using basic libraries related to CV and NLP, tools related to software testing and AWS.

Soft skills:

- Native and Bilingual proficiency in English and Bangla.
- Public Speaking, Presentation, Problem Solving, Writing Reports, Critical Thinking, Leadership, Strong work Ethic.
- Capable of working alone or in a team, Good with giving and receiving constructive feedback.

Work Experience:

- Data Science and Machine Learning Engineer, Neovotech **August, 2022 - Present**
- Machine Learning Engineer, NybSys **April, 2022 - July, 2022**
 - Worked on an OCR/OMR solution for a school where I applied machine learning for single and multiple digit recognition. Helped in creating the entire pipeline. My other major contributions were in setting up connection using mqtt, image pre-processing and page alignment.
 - Contributed in projects such as drowsiness detection, people counter for counting the number of people in a CNG, and a surveillance system.
- Research Assistant **July, 2021 - October, 2021**
 - Supervised by Dr. Shafin Rahman, Assistant Professor at North South University. (Website : Shafin Rahman (google.com))
 - Worked with large datasets consisting of 2D images and 3D point clouds. Created graphs, helped with writing an academic paper. Carried out experiments independently.
- Teaching Assistant, North South University. **June, 2019 - May, 2022**
 - Taught C Programming Language, Digital Logic and Data Structures to struggling students. Created and checked assignments and helped teachers with proctoring and organizing marks.

Github:

<https://github.com/Mahirobot>

Address:

Dhaka, Bangladesh

Education:

- B.Sc. in Computer Science and Engineering from North South University, Dhaka (C.G.P.A 3.83, Graduated Summa Cum Laude)
- 2022
- H.S.C, Ideal School and College, Dhaka Board (G.P.A 5)
- 2016
- S.S.C, Ideal School and College, Dhaka Board (G.P.A 5)
- 2014

Certification:

- Data Analysis Career Path, Code Academy
- 2020
- Deep Learning Specialization, Coursera
- 2020

Awards and

Achievements:

- Graduated Summa Cum Laude (B.Sc. CSE from North South University)
- 2022
- Regionalist of International Collegiate Programming Contest (ICPC)
- 2018
- 1st place in Programming contest arranged by ACM-W
- 2018

Extracurriculars:

- Former member of NSU Problem Solvers
- 2017 - 2018
- Former operation in-charge of ACM-W
- 2018
- Former Scout.
- 2007 - 2011

References:

Dr. Riasat Khan

Assistant Professor

ECE Department

North South University

Contact Details:

riasat.khan@northsouth.edu

Dr. Shafin Rahman

Assistant Professor

ECE Department

North South University

Contact Details:

shafin.rahman@northsouth.edu

Publication:

- Townim Chowdhury, Mahira Jalisha, Ali Cheraghian, and Shafin Rahman. "[Learning without Forgetting for 3D Point Cloud Objects](#)", Published in: International Work-Conference on Artificial and Natural Neural Networks, (IWANN), 2021.

Projects:

Software:

- [Automatic Detection and recognition of Offline Handwritten Cursive Bengali Text](#)
 - 2021, Academic project
 - Currently working on the paper.
 - Built a pipeline that takes in a pdf or an image with handwritten Bengali text and transforms it into editable text in a text file. Dataset: Collected and Annotated a new dataset. Models used: LineCounter, CRNN+CTC loss. Skills: Data annotation, cleaning, pre-processing
- [Improving Loss Functions for Automatic Semantic Segmentation of Kidney and Kidney Tumor](#)
 - 2020, Academic project
 - Dataset: KiTs19 , Model used : CNN, Skills acquired: 3D data analysis and visualization, Nifti format, loss function comparison for medical data
- [Analyzing the Context of Similar Words in Different Newspapers](#)
 - 2021, Academic project
 - Dataset : Combination of articles from 1. Prothom Alo, 2. Bangladesh Protidin, 3. Ittefaq, 4. Jugantor, 5. Fake News. Keywords: Skip Gram, CBOW, Word2Vec, Gensim, Clustering, Bengali NLP, Data Analysis and Visualization
- [Cell detection of malarial parasite infected cells using deep learning](#)
 - 2019, Academic and Personal project
 - Models used: Faster R-CNN, YOLO5l, Skills used: Data manipulation and visualization Tools used: numpy, pandas, matplotlib, seaborn
- [Performed Data Analysis on Covid-19 data of Bangladesh](#)
 - 2020, Personal project
 - Made choropleth maps that visualizes district wise population count, total covid cases and their ratio. Used bar plots to show the distribution of covid-19 in all the districts. Skills used: Web scraping, data cleaning, data manipulation, data visualization. Tools used: Numpy, Pandas, geojson, beautifulsoup, plotly
- [Built a multi-class text classifier](#)
 - 2020, Personal project
 - Built a text classifier that classifies texts into 3 classes. Tools used: scikit-learn, regular expression, Natural Language toolkit, numpy, pandas. Skills used: Data cleaning and manipulation, built NLP pipelines for the classifier

Hardware:

- [Water Level Monitoring System using Cloud Computing](#)
 - 2019, Academic and Personal project
 - Hardware used : HC-SR04 ultrasonic sensor, Node MCU, Arduino UNO
Software used : Blynk, ThingSpeak, Arduino IDE