# Mansura Mokbul

Machine Learning Enthusiast | Committed to Advancing ML Applications

Sylhet, Bangladesh 6 +8801303592271 @ mansu.neub@gmail.com

### **Profiles**

in Mansura Mokbul

Mansura28

### **Summary**

Machine learning enthusiast with hands-on experience in supervised learning, data analysis, and building predictive models. Passionate about advancing machine learning applications and seeking opportunities to contribute to impactful projects. Aiming to develop deep expertise as a Machine Learning Engineer.

### **Course Work**

Data Structure, Algorithm Design & Analysis, Object-Oriented Programming, Computer Networking, Database Management Systems, Web Engineering, Software Engineering, Compiler Construction, Operating System, Artificial intelligence, Machine Learning, Deep Learning.

### **Education**

North East University Bangladesh Computer Science and Engineering 3.68/4 January 2020 - January 2024

B.Sc. Engineering

### **Projects**

#### Handwritten Bengali Vowel Recognition using Few-shot Learning (Thesis)

- Applied few-shot learning with only 55 labeled images, leveraging data augmentation and HOG features.
- Trained a Prototypical Network to classify images using distance-based prototype matching.

Algorithms: Prototypical Networks, HOG.

#### **Ingredients Generation from Food Image**

- Utilized ResNet-50 for feature extraction and trained a custom FoodGenerator neural network.
- Built a Streamlit interface for predicting food titles and ingredients from uploaded images.

Algorithms: ResNet-50, FoodGenerator neural network.

#### **Heart Disease Prediction**

- Developed a text-based interface for predicting heart disease using Logistic Regression, KNN, or SVM.
- Enabled user input for key health features to dynamically select and run prediction models

Algorithms: Logistic Regression, K-Nearest Neighbors (KNN), Support Vector Machine (SVM).

#### **Credit Scoring Model**

- Created a logistic regression model to predict loan outcomes as "good" or "bad" based on financial data.
- Included decile analysis to optimize loan approval thresholds and balance profitability and risk.

Algorithms: Logistic Regression, Decile Analysis.

### **Emotion Recognition from Speech**

- Extracted MFCCs from speech and trained an LSTM model to classify emotions such as happiness, anger, and sadness.
- Utilized deep learning techniques for accurate emotion recognition from audio inputs.

## Volunteering

### ❖ NEUB CSE Society

Senior Executive member North East University Bangladesh

June 2023 - Present

### ❖ NEUB CSE Society

Assistant General Secretary North East University Bangladesh

March 2022 - June 2023

### **Skills**

Programming Languages: Python, Java, Go, SQL, C

Database: MySQL

ML/DS Libraries: scikit-learn, TensorFlow, PyTorch, pandas, numpy

ML Algorithms: Linear Regression, Logistic Regression, Decision Trees, SVM, K-Means

Clustering, Naive Bayes, PCA, Gradient Descen

Tools: Git, Jupyter Notebook, Google Colab, Excel

#### **Interests**

Cooking, Reading, Self-improvement.

#### Certifications

Data Science & Machine Learning with Python for Beginners
Ostad

September 30, 2024 - Ongoing

❖ 30 days masterclass on Data Analytics

Pantech Prolabs India Pvt Ltd

October 2, 2023 - November 13, 2023

21st Century Employability Skilling Program

Wadhwani Foundation

November 09, 2023

❖ 30 days internship on Machine Learning

Pantech Prolabs India Pvt Ltd

August 31, 2023 - October 3, 2023

Participation in "Introduction to bdapps-National Appstore"

bdapps(A Concern of Robi Axiata Ltd.)

August 21 2021

❖ Participate in the ICPC Asia Dhaka Regional Preliminary Contest 2020

### Languages

Bengali, English, Hindi.