Soumen Sarker

Dhaka, Bangladesh

Mail LinkedIn GitHub website

CAREER OBJECTIVE

Dedicated to finding solutions to problems, passionate about software engineering, machine learning, and data science. Working in a collaborative setting with experts in my areas of interest will help me advance my professional career.

EXPERIENCE

- Working with research teams in the domain of Natural Language Processing
- Data Science, Machine Learning, and Deep Learning (NLP, Computer Vision) projects
- Kaggle Competitions
- Problem Solving, OOP

EDUCATION

- **Islamic University, Kushtia, Bangladesh** *B.Sc. in ICT*
  CGPA: 3.52 out of 4.0 *March 2016 – September 2021*
- **Govt. Azizul Haque College, Bogura:5800** *HSC, Science group*

PUBLICATIONS & PROJECTS

Publication:

Title: WhyMyFace: A Novel Approach to Recognize Facial Expressions Using CNN and Data Augmentations
Conference Paper

Deep learning projects:

i. Final Year Project:

- A Sentiment Classification model by comparing naive Bayes, DNN, RNN, and LSTM classification models.
- Automatic Text Summarization with Transformer Architecture.

Key aspects:
TF-IDF, stem/lemmatize, tokenization, vector embedding, n-gram, NMT, seq2seq, attention, gradient descent, rmsProp, transformer architecture!
Link

ii. Built and Deployed an NLP application that reveals named entities, classifies sentiment, and does text summarization using spacy, textblob, genism, streamlit and heroku.
Link

iii. Image Classification/Browser based model to classify Rock/Paper/Scissors
Browser-based model, node.js, training with and without transfer learning, evaluating,

alerting on browser!

- Model created with Tensorflow Keras in python
- Convert the Keras model into JSON format using the Tensorflow.js converter

Link

iv. Built and deployed a CV application that detects faces, smiles, and eyes, do enhance as well as filters like cartoonish. **App link**

Machine Learning & Data Science Projects:

i. House Price Prediction

- Feature Engineering and Selection
- Model building
- Creating an ML pipeline
- In-house software using Scikit-learn API(OOP, Inheritance, Transformers, Pipeline) and recreating an optimized pipeline(python environment)
- Packaging the model for production(requirements files, tox, pyproject.toml)
- Serving and deploying the model via REST API(Fast API, HTML, UVicorn web server, Heroku)

APP Link

TECHNICAL SKILLS

- C
- C++
- Python
- OOP
- Data Structures
- Machine Learning
- Deep Learning
- Data Science
- Tensorflow
- Pytorch
- Computer Vision
- NLP
- Git
- Scikit-Learn
- SQL
- Scipy
- Numpy
- Panda

COURSES & CERTIFICATES

- Natural Language Processing with Sequence Models-Coursera
- Natural Language Modeling with Classification and Vector Space-Coursera
- Deep Learning Specialization – *Coursera*
- DeepLearning.AI TensorFlow Developer -Coursera
- Machine Learning – *Coursera*
- Algorithms on Graphs coursera
- Algorithmic Toolbox by UCSanDiego- Coursera