



Rakib Hossain Rifat

183/2, Titas Road, East Rampura, Dhaka Bangladesh

+880 1521436179 | rakibhossain1521@gmail.com | rakib1521.github.io/rakibhossain/ | [rakib1521](#) | [in](#)

[rakib-hossain-rifat](#) | www.hackerrank.com/rakibhossain1521/

About Me

Looking for opportunities to build my career in the machine learning sector that would help me in achieving greater practical excellence through a continuous learning process, perseverance, hardworking nature, and good communication skills, which will help me to contribute to the growth of the organization.

Experience

Machine Learning Engineer

Silicon Orchard Limited

19 May 2023 - Present

Responsibilities:

- ✓ Work as a researcher in Silicon Orchard Research and Analytics Lab
- ✓ Study and transform data science prototypes.
- ✓ Design machine learning systems.
- ✓ Research and implement appropriate ML algorithms and tools.
- ✓ Develop machine learning applications according to requirements.
- ✓ Train junior Machine Learning Engineers.

Machine Learning Instructor (Part-Time)

London Academy of IT

01 March 2023 - Present

Responsibilities:

- ✓ Develop and deliver comprehensive training programs on Machine Learning concepts, algorithms, and techniques to both technical and non-technical audiences.
- ✓ Develop curriculum, lesson plans, and training materials that are engaging, interactive, and effective.
- ✓ Work with stakeholders to identify training needs and customize training programs to meet those needs.
- ✓ Collaborate with other instructors, subject matter experts, and developers to create and maintain effective training materials.
- ✓ Continuously evaluate and improve training programs to ensure they meet the needs of learners and stakeholders.
- ✓ Stay up-to-date with the latest developments in Machine Learning and related technologies.

Trainee Officer

AB Bank - IT Division

08 September 2022 - 28 May 2023

Responsibilities:

- ✓ Work as an in-house developer in IT Division.
- ✓ Design and develop internal applications as per requirement.
- ✓ provides support to branch officials.
- ✓ provide training to branch officials.

Machine Learning Engineer (Remote)

Polyfins Technology Inc

01 September 2021 - 06 September 2022

Responsibilities:

- ✓ Study and transform data science prototypes.
- ✓ Design machine learning systems.
- ✓ Research and implement appropriate ML algorithms and tools.
- ✓ Develop machine learning applications according to requirements.
- ✓ Select appropriate datasets and data representation methods.
- ✓ Perform statistical analysis and fine-tuning using test results.
- ✓ Train, evaluate, and deploy AI systems when necessary.
- ✓ Extend existing ML libraries and frameworks.
- ✓ Keep abreast of developments in the field.

Education

Masters of Science (MSc.) in Computer Science and Engineering (Ongoing)

Brac University CGPA: 4.00 out of 4.00 (Thesis Ongoing)

Bachelor of Science (BSc.) in Computer Science and Engineering

Ahsanullah University of Science and Technology

2016-2021 CGPA: 3.386 out of 4.00

Higher Secondary Certificate (HSC)

Dhaka City College


2016 GPA: 4.83 out of 5.00


Secondary School Certificate (SSC)


Ideal School and College


2014 GPA: 5.00 out of 5.00


Publications & Thesis

 A. C. Shruti, **R. H. Rifat**, M. Kamal and M. G. R. Alam, "A Comparative Study on Bengali Speech Sentiment Analysis Based on Audio Data," 2023 IEEE International Conference on Big Data and Smart Computing (BigComp), Jeju, Korea, Republic of, 2023, pp. 219-226, doi:10.1109/BigComp57234.2023.00043 .

 M. Kamal, **R. H. Rifat**, A. Chakraborty Shruti and M. G. Rabiul Alam, "Multi-criteria Decision Theoretic Approach for Tour Package Selection using Fuzzy AHP and TOPSIS Methods: A Case Study on Cox's Bazar," 2023 IEEE 8th International Conference for Convergence in Technology (I2CT), Lonavla, India, 2023, pp. 1-7, doi:10.1109/I2CT57861.2023.10126334

 **Rakib Hossain Rifat**, Abanti Shruti, Marufa Kamal, and Farig Sadeque. 2023. **ACSMKRHR at SemEval-2023 Task 10: Explainable Online Sexism Detection(EDOS)**., In Proceedings of the The 17th International Workshop on Semantic Evaluation (SemEval-2023), pages 724–732, Toronto, Canada. Association for Computational Linguistics, URL:<https://aclanthology.org/2023.semeval-1.99>

 **Federated Learning for Potato Leaf Disease Detection using CNN**
Marufa Kamal, **Rakib Hossain Rifat**, Abanti Chakraborty Shruti, Ehsanur Rahman Rhyth, Md Humaion Kabir Mehedi and Annajiat Alim Rasel. *The 2023 International Conference on Digital Image Computing: Techniques and Applications, Port Macquarie, Australia, under review.*

 **Comparison of Machine Learning Models for Early Prediction of Diabetes with LIME Interpretability**
Abanti Chakraborty Shruti, Marufa Kamal, **Rakib Hossain Rifat**, Ehsanur Rahman Rhyth, Md Humaion Kabir Mehedi and Annajiat Alim Rasel. *2023 IEEE 11th Region 10 Humanitarian Technology Conference (R10-HTC), and Systems, under review.*

Facial Expression Recognition: A Comparison on Various Aspects

It was my undergraduation thesis. This study aims to simplify the facial expression recognition system by using custom CNN architecture, this system can identify seven facial expressions (Fear, Sad, Neutral, Surprise, Angry, Disgust, Happy) and for this, we have used multiple custom CNN architecture and transfer learning models. Using two different datasets, we have compared them between 8 custom CNN models and 3 transfer learning models.

Tour Package Recommendation System in Cox's Bazar Using TOPSIS and Fuzzy AHP

In this Academic project , I have made my contributions in building a recommendation system using TOPSIS and Fuzzy AHP.

Language: Python Tools: Google Colab

A Comparative Study on Bengali Speech Sentiment Analysis Using Machine Learning and CNN Models

In this Academic project , I have made my contributions in creating A Comparative Study on Bengali Speech Sentiment Analysis Using Machine Learning and CNN Models .

Language: Python Tools: Google Colab

Eczema Severity Score Prediction Using Deep Learning Techniques

In this project of Polyfins Technology Inc, I have made my contributions in predicting Eczema severity score from Images.

Language: Python Tools: Google Colab

Body Part Segmentation And Separation From Full Body Image

In this project of Polyfins Technology Inc, I have made my contributions in creating a pipeline that can segment and separate full body image into different part.

Language: Python Tools: Google Colab

Image Quality Assessment Using Deep Learning Techniques

In this project of Polyfins Technology Inc, I have made my contributions in Image Quality Assessment.

Language: Python Tools: Google Colab

"FixMatch: Simplifying Semi-Supervised Learning with Consistency and Confidence" Google Colab implementation

This implementation is done for Multiclass Classification, Multi Label Classification and Multi output Classification.

Language: Python Tools: Google Colab

SimCLR A Simple Framework for Contrastive Learning of Visual Representations

Google Colab implementation of SimCLR using pytorch

Language: Python Tools: Google Colab

Harassment Detection from Social Media Bangla Comments using Deep Learning

A system to identify harassment from the social media Bangla comments

Language: Python Tools: Google Colab

Gender Detection From Bangla Handwritten Images

Gender Detection From Bangla Handwritten Images using Logistic Regression and Deep Neural Network

Language: Python Tools: Google Colab

Bengali Handwritten Digits Classification

Bengali handwritten digits classification from image using Logistic Regression and Deep Neural Network

Language: Python Tools: Google Colab

Face Mask Detection

A binary classification model that can classify some one using mask or not.

Language: Python Tools: Google Colab

Pneumonia X-ray Detection

This model can detect if there is any abnormality in chest X-ray image.

Language: Python Tools: Google Colab

Handwritten Digits Classification

This model can detect handwritten digits from Image.

Language: Python Tools: Google Colab

Audio Book Using Python

Python Desktop application that can read PDF.

Language: Python Tools: VS code

Production Prediction

Using Distributed database system it can predict loss/profit and production.

Language: PL/SQL Tools: SQL++

Smart Home

A hardware project

Language: Arduino Tools: Arduino IDE

Chaldaldotcom

A E-commerce website

Language: PHP, HTML, CSS, JavaScript Framework: Bootstrap Tools: Sublime Text

Mobile Financial Service

A database project that contains mobile financial service features

Language: Java , MSSQL Tools: Netbeans

The Canteen

Android Application for ordering food

Language: Java, XML Tools : Android Studio

Technical Skills

- ⚙️ **Programming Languages:** Python, C, C++ , Java, MySQL, PHP, SQLite, PL/SQL
- ⚙️ **Machine Learning, Deep Learning**
- ⚙️ **Libraries:** Tensorflow, Keras, Pytorch, Poutyne
- ⚙️ **MLOps:** Tensorboard, Mlflow, Wandb
- ⚙️ **Operating System:** Windows, Ubuntu

- ⚙️ **Designing Tools:** HTML, CSS
- ⚙️ **IDE:** VS code, CodeBlocks, NetBeans, PyCharm, Android Studio, MS Visual Studio, Arduino, MATLAB, Proteus, MS SQL Server, Sublime Text, emu8086
- ⚙️ **Others:** GitHub, Microsoft Office

Personal Skills

- **Language:** Fluent Bangla, English.
- Hardworking personality.
- Always eager to learn new things.
- Highly comfortable working in a group or independently.

Certifications

- ⚙️ Problem Solving (Basic) from HackerRank.
- ⚙️ Python (Basic) from HackerRank.
- ⚙️ SQL (Intermediate) from HackerRank.
- ⚙️ Deep learning specialization from Coursera.
- ⚙️ DeepLearning.AI TensorFlow Developer from DeepLearning.AI on Coursera.
- ⚙️ Cleaning Data in Python from Datacamp.
- ⚙️ Introduction to Importing Data in Python from Datacamp.
- ⚙️ Introduction to Data Science in Python from Datacamp.

Extra curricular

- ⚙️ **Mentor: DeepLearning.AI TensorFlow Developer Professional Certificate Specialization at Deep Learning.AI On Coursera**
- ⚙️ **Mentor: TensorFlow: Data and Deployment Specialization at Deep Learning.AI On Coursera**
- ⚙️ Former Vice President at AUST Blood Donation Club
- ⚙️ Former General Secretary at Ideal Science And Technology Aiming Research Council.

Reference

Mr. Md. Khairul Hasan

Associate Professor

Department of Computer Science and Engineering
Ahsanullah University of Science and Technology

Email: khairul271276@aust.edu

Contact No: +8801711109629

Ms. Qamrun Nahar Eity

Assistant Professor

Department of Computer Science and Engineering
Assistant Proctor-AUST
Ahsanullah University of Science and Technology

Email: eity.cse@aust.edu

Contact No: +8801680033969