MD. ADNAN HOSSAIN

Technical Skills

- Languages: Python, C, HTML, CSS, SQL
- Data Science Tools: TensorFlow, NumPy, Pandas, Matplotlib, Tkinter, Pytorch, OpenCV
- Database: MySQL
- Tools & Platforms: Git, GitHub, Jupyter Notebook, Google Colab, VS Code, PyCharm

Research Works

• Machine learning insights for identifying suicidal signals in social media posts:

This research is focused on developing LSTM, GRU, and CNN models for classifying suicidal intentions in social media posts.

• A gated recurrent unit approach to predict suicidal ideation from social media posts:

This work is focused on developing GRU-based models in order to classify suicidal intent in social media posts, evaluating performance across varying dataset sizes.

Internship

Centre For Data Science Research

 $ML\ Engineer\ Intern$

583, West Shewrapara, Mirpur, Dhaka-1216 October 2024 - March 2025

- Handled data cleaning, preprocessing, and visualization to support ML/DL model development for sentiment analysis.
- Designed, developed, and optimized AI solutions in NLP, ML, and Computer Vision, collaborating cross-functionally to solve complex problems using state-of-the-art techniques.

Projects

1. Face Recognition Based Attendance System

Python, Tkinter, Numpy, Pandas, OpenCV

- Developed a real-time face recognition attendance system using a webcam.
- Automated student identification and reduced manual effort by 100% in classroom management.

2. Color Detection From Images

Python, Pandas, Opency

- Built a color detection system to identify colors from image pixels on user click.
- Matched detected colors using distance algorithms against 800+ named colors.

3. Objects Detection Using OpenCV-Python

Python, Pandas, Opencv

- Implemented a real-time object detection system using OpenCV and Python.
- Applied computer vision to improve accuracy and automation in object recognition.

4. Desktop Chatbot Application

Python, Tkinter, PyTorch

- Developed a Python-based AI chatbot with a Tkinter GUI for desktop interaction.
- Enabled real-time responses to simulate human-like conversations.

Education

Patuakhali Science and Technology University

January 2019 - Running

B.Sc. in Computer Science and Engineering

• Relevant Coursework: Machine Learning, Web Development, Database Management, Software Engineering, Data Structures & Algorithms, Data Mining, Artificial Intelligence.

Online Certification

Machine Learning Specialization

Stanford University and DeepLearning.AI

February 2025 - April 2025

Course ra

- Supervised Machine Learning: Regression and Classification.
- Advanced Learning Algorithms.
- Unsupervised Learning, Recommenders, Reinforcement Learning.

Volunteer and Leadership Roles

Vice President

January 2024 - March 2025

CSE Club, PSTU

- Organized technical events, including workshops, hackathons, and programming contests.
- Handled social media presence, designing and publishing engaging posts to boost visibility and student participation.
- Established and nurtured strong relationships with partners in the industry.
- Oversaw the management of club resources and strategized future technical initiatives.