SOHAG AHAMMED SIYAM

CONTACT

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https://github.com/espsiyam

https://www.kaggle.com/espsiyam

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SKILLS

Programming Languages:
Python, C, C++

Machine Learning Algorithms:
Regression, SVM, KNN, K-Means , Random Forest Tree, LGBM, XGBoost

Deep Learning Framework:
Tensorflow, Keras

Deep Learning Algorithms:
CNN, U-NET, YOLOv3, YOLO5, Efficientdet, LSTM

Web Framework:
Flask (api)

Model Deplyment:
Web, Android

Database:
MySQL, SQLAlchemy

Front-End:
HTML, CSS, Bootstrap

ACHIEVEMENTS

Notebook Expert on Kaggle

WORK EXPERIENCE

Computer Vision Research Intern

Brainekt | July 2021 - September 2021

- Scrape and annotate image data.
- Train different baseline CNN models.
- Analyze recent papers to improve the performance of the models.
- Generate reports regarding the performances of different models.

Computer Vision Intern

Barikoi | October 2021- Present

- Collect and Preprocess the data from different sources
- Train and evaluate image classifiers using transfer learning.
- Optimize the model for edge devices.
- Deploy the model on android.
- Trained custom YOLOv4 model for object detection and counting

THESIS

Bangladeshi Vehicle Detection and Recognition using YOLOv5X (In review stage)

The goal of this project was to detect 21 types of local vehicles. The major challenges were class imbalance, night image, bird's eye view. To tackle these issues, focal loss, data augmentation, model ensembling, hyper-parameter tuning were introduced. After all of these, the mAP is 6.78, and the class loss is 0.004
Video Demo:
https://drive.google.com/file/d/1StRAkthLP5WdiXcu221w0LJDDh38HzzH/view

PROJECT

End-To-End Credit Card Fraud Detection

The goal of the project is to classify whether the transaction is fraud or not. The major challenge with this project is dealing with a huge amount of data, class imbalance, and unexplainable features. To solve these issues, I conducted EDA, PCA, XGBoost, LightGBM, Upsampling, Downsampling, etc. The score on the Kaggle leaderboard is: 0.939961.

Project Link: https://github.com/espSiyam/IEEE-CIS-Fraud-Detection
Live App: https://fraud-transaction-detection.herokuapp.com/

TOXIC COMMENT CLASSIFICATION

This is a Kaggle competition hosted by Jigsaw and Google to identify toxic comments in online conversations. This project involved Data cleaning, Tokenization, Embedding, Bidirectional LSTM, and Callbacks. The validation accuracy and loss are 0.9653, 0.0900 respectively.

Project Link: https://github.com/espSiyam/Toxic-Comment-Classification

EDUCATIONAL

Daffodil International University

B.SC. IN SOFTWARE ENGINEERING | Jan 2018- Nov 2021

CGPA: 3.78