# **MD MALEK SARKER**

Cell-Phone: +880 1712206081 \$\rightarrow\$ Uttara, Sector-10, Road-9, Dhaka Email: maleksarkerlimon7@gmail.com \$\rightarrow\$ LinkedIn: limon7

#### RESEARCH INTEREST

Machine Learning, Computer Vision, Data Mining, Network and System Security

#### ACADEMIC CREDENTIALS

## International University Of Business Agriculture and Technology(IUBAT)

2018

Bachelor Of Science in Computer Science and Engineering

CGPA: 3.20/4.0

Final year Project: Development of an Enterprise Resource Planning (ERP) system.

Supervisor: Md. Rashedul Islam

# **PROJECT**

# **Object Detection on PASCAL VOC Dataset**

• I had hands-on experience with data augmentation including horizontal flips random brightness, and contrast adjustments. I applied a faster R-CNN model with a ResNet-50 backbone and replaced the pre-trained head with a new head suitable for the Pascal VOC dataset. The project includes visualization of the model's predictions on a set of images from the ImageNet validation dataset.

# Image classification on CIFAR-10 dataset

• Defined custom Convolutional Neural Networks model using Keras functional API. The model consists of convolutional layers (Conv2D), batch normalization, max-pooling, dropout, and fully connected layers (Dense). The model is evaluated on the test set and the predictions are visualized using functions from Matplotlib libraries.

#### **Heart Disease Prediction**

 Worked with the heart disease dataset from the UCI repository. I had hands-on experience with dealing with missing values, categorical values, and preprocessing. After preprocessing, I applied Logistic Regression, Random Forest Classifier, and K-Nearest Neighbor. I had also practical experience evaluation metrics such as confusion metrics.

# Cat vs. Dog Image Classification

• I had hands-on experience with data preprocessing, data augmentation. I defined my custom CNN architecture using Keras and TensorFlow.

#### TECHNICAL SKILLS

**Programming Languages:** C#, C, C++, Python, Javascript

Database: SQL, NoSQL

Frameworks: TensorFlow, PyTorchAngular, RxJS, ASP.NET Core

**Interface:** Machine Learning

Development Tools: Visual Studio, CodeBlocks, Jupyter NoteBook, Colab

Libraries: NumPy, Pandas, Matplotlib, Tensorflow

Version Control: Git & Github, Gitlab

### PROFESSIONAL EXPERIENCES

Software Engineer

- Optimized latency using caching, resulting in improved system overall performance and user experience.
- Solved concurrency problems and implemented and utilized messaging protocol for efficient communication between system components. Moreover, I worked for regular security audits, addressing vulnerabilities and ensuring compliance with industry security.

#### **Infonet Associates**

April 2021 to September 2021

Software Engineer

- I was a leading contributor to design and develop a robust system for Bangladesh Power Development, currently serving over 200 million users per month, demonstrating scalability and reliability.
- Optimized big data queries for analytics, enabling faster insights and decision-making.

# LINGUISTIC PROFICIENCY

- English (Fluent Working Proficiency)
- Bangla (Mother Tongue)

#### EXTRA-CURRICULAR ACTIVITIES AND ACHIEVEMENTS

- Best employee of the month July 2021, at Infonet Associates Ltd.
- Home Tutor (8th to 12th Grade)-December 2014 to February 2019
- Volunteer of IUBAT programming contest-2016

# **REFERENCES**

Md. Rashedul Islam,

Assistant Professor, Department of Computer Science and Engineering International University Of Business Agriculture and Technology(IUBAT) Embankment Drive Road, Sector-10, Dhaka-1230

Cell-Phone: +880 1776 445218

rashed@iubat.edu