# Lamia Anjum

Bachelor of Science in Computer Science and Technology

Email: lamianjum123@gmail.com Website: https://lamiaanjum123.github.io/

### Objective

I have completed B.Sc. in Computer Science and Engineering from Ahsanullah University of Science and Technology (AUST), Dhaka, Bangladesh. As a B.Sc. graduate, I am an enthusiastic and dedicated individual with a passion for scientific inquiry and a strong desire to make a positive impact on the world through my knowledge and skills. Throughout my undergraduate journey, I have acquired a solid foundation in my chosen field of study, which has nurtured my curiosity and ignited a drive to pursue further academic and professional endeavors. I am seeking Ph.D. opportunities to further explore and contribute to the field of human-computer interaction along with Machine Learning, Deep Learning and Artificial Intelligence.

### Education

#### B.Sc. in Computer Science and Engineering (CSE)

April 2017 - January 2022

Ahsanullah University of Science and Technology, Dhaka, Bangladesh.

**GPA: 2.928** on a scale of 4.00

### Research Interests

Human Interaction
 Artificial Intelligence

Machine Learning
 Big Data

Deep Learning
 Image Processing

# Research Backgrounds

- "Video Based Vehicle Detection and Tracking Using Image Processing and Deep Learning Using Customised Dataset" A Deep Learning-based final year thesis research is conducted in this study. The research involves the utilization of Deep Learning algorithms, namely YOLOv5, M-RCNN, and SSD, for object detection. Additionally, tracking is performed using DeepSORT, GOTURN, and MDNet algorithms. The research also encompasses vehicle speed and vehicle number counting. A personally customized dataset of local vehicles from Bangladesh is employed, and MakeSense.AI is utilized for image labeling purposes. Read the article.
- "Local Vehicle Detection using (HOG and SVM) Machine Learning "This study uses the *Histogram of Oriented Gradient (HOG)* for extracting features and *Support Vector Machines (SVMs)* for detecting vehicles. The aim of this research is to identify local vehicles one by one and determine their accuracy. The study also addresses common challenges and outlines potential future work and plans. *Read the article.*

## Language proficiency

Bangla, English (IELTS - 7.5)

#### Technical Skills

- Languages: Python, Java, C, C++, HTML/CSS, SQL.
- O Database: MySQL, Oracle Database
- O Libraries: NumPy, Pandas, Matplotlib, Seaborn, scikit-learn
- o Frameworks: Keras, TensorFlow, PyTorch, Bootstrap
- O Tools & Technologies: Git, Anaconda, Jupyter Notebook
- Others: Microsoft Excel, LaTeX

### Academic Projects

Cooker: An andriod app where it suggests recipes based on user's choice of ingredients.

o IDE-Andriod Studio, Database - firebase, Language: Java. project details here

Rokto Sondhan: Blood group finder and ambulance service providing android app

o IDE- Andriod Studio, Database - firebase, Language: Java. project details here

Project Infinity War: A first person game based on Marvel Comics Characters by Stan Lee.

o IDE- Microsoft Visual Studio, Compiler: Visual C++. project details here

Beauty Painters: An ASP webfrmae based website for makeup items.

IDE- Microsoft Visual Studio , Database - MySQL,
 Web Framework: ASP.Net project details here

### Reference

#### Dr.-Ing. Nusrat Jahan Lisa

Assistant Professor, Dept. CSE, Ahasanullah University of Science and Technology nusratlisa.cse@aust.edu

### **Tonmoy Hossain**

PhD Student, Department of Computer Science University of Virginia
Former Lecturer, Dept. CSE, Ahsanullah University of Science and Technology dihan@virginia.edu