# Farjana Sultana Samia

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#### **OBJECTIVES**

To pursue a challenging and research-oriented career in the fields of Artificial Intelligence, Machine Learning, Deep Learning, Data Science, Natural Language Processing.

#### RESEARCH INTERESTS

Artificial Intelligence — Machine Learning — Natural Language Processing — Data Science

#### STANDARDIZED TEST

General GRE: Total Score: 296 (Verbal-139, Quantitative-157, Analytical Writing-3.0)

#### **EDUCATION**

## B.Sc. in Computer Science and Engineering

(Feb 2017 - Jan 2022)

Manarat International University(MIU)

**CGPA:** 3.90 out of 4.00

Thesis: Prediction of COVID-19 from Chest X-ray Images Using CNN And Pre-Trained Models

## **Higher Secondary Certificate**

(2014 - 2016)

Shaheed Bir Uttam Lt. Anwar Girl's College(SAGC)

**GPA:** 5.00 out of 5.00

#### Secondary School Certificate

(2012 - 2013)

Uttara High School and College(UHSC)

**GPA:** 5.00 out of 5.00

## TECHNICAL SKILLS

- Programming Languages: C/C++, C, R, Matlab, Python
- Python: Machine learning model, Flask Python libraries (TensorFlow, Matplotlib, Numpy, Keras, Pandas)
- Web Technologies: (HTML, CSS, Bootstrap, Asp.net)
- Data Science: Web Scraping, Selenium

## **PROJECTS**

#### **Project 1** CIFAR-10 - Object Recognition in Images (Computer Vision)

GitHub

- Object Recognition in CIFER-10 Images (CIFAR-10 dataset consists of 60000 32x32 colour images in 10 classes).
- Using Python Keras library.

#### **Project 2** Flask based University CGPA system website

GitHub

- This semester grading system is based on Python Flask.
- I've used here Bootstrap for designing the website.

# Project 3 Basic Face Detection using CNN

GitHub

- I have applied a simple CNN model on my nephew's happy and sad photos
- It can detect my nephews happy and sad face properly.

#### RELEVANT COURSEWORKS

## **Undergraduate Courses:**

• Structured Programming (C), OPP (Java), Data Structures, Algorithms, Statistics and Probability, Database Systems, Operating Systems, Software Development, Computer Graphics, Internet and Web Programming (HTML, CSS, JS, PHP), Computer Networking, Artificial Intelligence, Neural Networks and Fuzzy Systems, Pattern Recognition, Computer Vision and Robotics.

#### Courses:

- Ishraak Solutions Limited -Machine Learning
- Coursera Data Science Math Skills

#### **EXTRA-CURRICULAR ACTIVITIES**

- Microsoft Bangladesh, Brand Ambassador (A Certificate of Recognition Brand Ambassador. Microsoft targets the youth and provides a platform for the people) (Aug 2018 Dec 2018)
- Young Bangla, Campus Ambassador (With the motto "Connecting the Dots", becomes a young talent to promote, share and spread out youth towards my community.)(Aug 2018 Dec 2018)
- Women Techmakers, Volunteer (Spreading and Developing women are technologically strong through this team )(Jan 2017 Mar 2019)

#### RESEARCH EXPERIENCE

- Undergraduate Research Work (Using Python)
- Thesis Title: Prediction of COVID-19 from Chest X-ray Images Using CNN And Pre-Trained Models
- Brief: Comparing Convolutional Neural Network And Seven Pre-Trained Models using a single data-set which is "COVID-19 Radiography Database". Among all pre-traind models VGG-16 has higher accuracy result and EfficientNetB0 Got the lower accuracy result.

#### TOOLS/SOFTWARE

- Github, VS Code, Jupyter Notebook, Matlab, Photoshop, SQL Server, OS (Ubuntu, windows)
- Document Processing: LaTeX, MS Office, Adobe Illustrator