Md. Zarif Ul Alam

CS Undergrad

+880 1915616046 | zarif98sjs@gmail.com | zarif98sjs.github.io | zarif98sjs | zarif98sjs

Education

Bangladesh University of Engineering and Technology (BUET) *Dhaka, Bangladesh*

B.S. in Computer Science and Engineering *April 2018 - Present*

- CGPA : 3.87/4
- Dean's List Award Recipient for all completed semester
- Received Scholarship of Merit in 2 semester

Skills

Programming Languages C++ , Python , Java , C# , Go
Frameworks TensorFlow , Keras , PyTorch , Django , JavaFx
Database Oracle
Tools Git , Bash , Docker

Projects

MooBot

Python , Discord API ,Graph API *April. 2021*

- Created a notification system for Moodle. Moodle doesn't come with built-in notification system. So I created one, synced with a discord bot. This helped my fellow university students to get quick notification from Moodle

innOcity

Web Development , Database , Django , Oracle *Dec. 2020*

- Created a hotel booking platform using Oracle database and Django framework

T-Rex On Mars

Unity Game Engine *Aug. 2020*

- Recreated the old classic game T-Rex from scratch using Unity

Fourier Art

Javascript , p5.js *Mar. 2020*

- Implemented Discrete Fourier Transform to draw art shape

Route de Dhaka

OpenStreetMap , Keyhole Markup Language , Python *Nov. 2019*

- Implemented custom modified Dijkstra algorithm to solve a transportation problem in Dhaka . Datasets contained detailed roads, metro-routes and bus-routes of Dhaka city

KichuPariNa ChatBot

Microsoft Azure , OpenCV , Python *Jan. 2019*

- Used Face API from Microsoft Azure to detect the mood of the user from the captured photos
- Used YouTube API to suggest songs based on the mood detected from the aforementioned point

Durbeen : The Dawn of Programming

JavaFx , Java *Jan. 2019*

- Created a Learning Tool for Programming in my mother language Bangla for Kids

Game of Pawns

OpenGL , iGraphics , C++ *Aug. 2018*

- Implemented multiplayer , single player and blitz mode using iGraphics Library and a custom mini chess algorithm for the single player mode

Research Experience

Application and Interpretation of Ensemble Methods for Darknet Traffic Classification

Submitted (Under Revision)

Supervisor : Md. Toufikuzzaman(BUET) *Dec. 2020*

- We successfully applied ensemble machine learning methods on the recently published CIC-Darknet2020 dataset to distinguish Darknet traffic apart from the Benign ones (with 98% accuracy) and further identify the type of application running beneath the Darknet traffic(with 97% accuracy)
- Besides, we adopted a game-theoretic approach to show the impact of the features and interpret the output of the machine learning models to better understand the behavior of the Darknet traffic.

Artificially Intelligent and Interactive MOOCs

Supervisor : Dr. Anindya Iqbal(BUET), Dr. Shubhra Kanti Karmaker(Auburn University) *April 2021 - Present*

- We aim to make MOOCs efficient and interactive by making a dynamic real-time Q&A system

Honors & Awards

2021 **Top 14 percent**, Kaggle Cassava Leaf Disease Classification *Kaggle*
2019 **Rated 1900+**, CodeChef *CodeChef*
2019 **Finalist**, CodeSamurai *Dhaka University*
2019 **First Runners Up**, Hackathon on Cloud Computing *BUET CSE Festival*