

# Md. Zarif Ul Alam

CS UNDERGRAD

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

## Education

### Bangladesh University of Engineering and Technology (BUET)

B.SC. IN COMPUTER SCIENCE AND ENGINEERING

Dhaka, Bangladesh

April 2018 - Present

- Currently in 3rd Year
- CGPA : 3.87/4

## Skills

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

## Work Experience

### ICT Cell, BUET

SOFTWARE DEVELOPER

Part-time

Dec. 2021 - Present

- Creating a custom software to make advance payment for the office of Directorate of Advisory, Extension and Research Services (DAERS)

### Unilever

BIZLEARNER (MACHINE LEARNING), UNILEVER FORECAST ENGINE

Part-time

Nov. 2021 - Dec. 2021

- Worked with a team that developed a new sales forecasting model for Unilever Bangladesh

## Experience

### Kaggle

COMPETITION MEDALIST

zarif98sjs

Dec. 2020 - Present

- Working on real life ML and DL problems, by collaborating with people all over the world
- **Silver Medalist**, *G2Net Gravitational Wave Detection* : Worked on finding Gravitational Wave signals from the mergers of Binary Black Holes
- **Top 12 %**, *Shopee - Price Match Guarantee* : Applied machine learning to build a model that predicts which items are the same products
- **Top 12 %**, *Rock, Paper, Scissors* : Used Reinforcement Learning to create an AI for the famous Rock, Paper, Scissors game
- **Top 14 %**, *Cassava Leaf Disease Classification* : Classified Cassava Leaf Disease, which helps farmers to quickly identify diseased plants, potentially saving their crops before they inflict irreparable damage

### Upwork

FREELANCE MACHINE LEARNING DEVELOPER

Sep. 2021 - Present

- Working as a freelance Machine Learning Developer, solving problems for clients

## Research

### 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

## Application and Interpretation of Ensemble Methods for Darknet Traffic Classification

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.

## 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

### 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

## Honors & Awards

---

2021 **Silver Medal**, G2Net Gravitational Wave Detection

Kaggle

2019 **Rated 1900+**, CodeChef

CodeChef

2019 **Finalist**, CodeSamurai

Dhaka University

2019 **First Runners Up**, Hackathon on Cloud Computing

BUET CSE Festival