

# A. E. M Ridwan

73/4 Shantinagar, Dhaka, Bangladesh 01521429557, 01977814600 ridwanshihab14466@gmail.com, a.e.m.ridwan@g.bracu.ac.bd ResearchGate | GitHub | LinkedIn

Last semester student at BRAC University. Doing major in CSE and minor in Mathematics. Currently doing elective course Data Science: Coding with real world data. Interested to work in the field of ML and Data Science.

# **Educational Background**

### **BRAC University**

Bachelor of Science in Computer Science and Engineering CGPA 3.75 After Completing 133 credit of 136 (2017-present)

Minor in Mathematics

CGPA 3.71

After Completing 21 credit of 21 (2017-present)

# **Work Experience**

### **Student Tutor (ST)**

BRAC University Spring 2020-Present

CSE330: Numerical Methods CSE110: Programming Language I CSE220: Data Structure Department of Computer Science and Engineering

#### **Volunteer Works**

- Lead Instructor
   BUCC Academy organized by
   BRAC University Computer
   Club Fall 2019-Spring 2021
- Former Assistant Director BRAC University Computer Club (BUCC)Department of Human ResourceSummer 2019-Summer 2020
- Former Senior Executive Robotics club of BRAC University Department of Finance

#### Skills

Java, Python, Machine Learning, Qiskit, Matplotlib, Numpy, Pandas, Seaborn, SciPy, Webots, Proteus, Labview, MySQL, Django, Arduino, Raspberry Pi, Git, Competitive Programming, Latex, Microsoft Office, Unity, EMU8086

# Research & Project

### **Publication**

"<u>Design and Implementation of a Smart Bike Accident Detection System</u>" 2020 IEEE Region10 Symposium (TENSYMP), Dhaka, Bangladesh, 2020, pp. 386-389, doi: 10.1109/TEN-SYMP50017.2020.9230656.

#### Thesis

<u>Quantum Error Correction using Quantum Convolutional Neural</u> <u>Network</u>

Ongoing work: An Neural Network Architechture For Railway Fault Detection with XAI

### **Projects**

**Autonomous Train Track Surveillance Robot :** finds faults on the train track using IR and sends the location of faults through GPS and GSM to the control room server

Bike accident detector and remedy: is a system that detects bike accidents using MPU6050, SIM808, Raspberry Pi and Arduino Uno and send a message containing location of the biker to the hospitals, policestations and registered family members.

Marketmanagement system: is a system for collecting shop rent mantaining shop developed using django

BRACU Charioteer: is a helping hand for the specially abled people. Easy to control with a joystick installed in the wheel chair, we used track chain instead of the normal wheel which helps it to climb the stairs. ECG sensor and Pulse sensor and medicine alert used here to help the patient. Patient can also call 999 with the chair.

Other projects: PD-LFR, Object-Avoiding-Robot, Smart Trash Can, Home Automation.

### **Awards and Grants**

- Semi Finalist at Robotics Reality show Esho Robot Banai
  Bangladesh's first ever Robotics Reality show where my team
  competed against universities of the country (April-2019)
- Secured 4th position (Fall-18) and 5th position (Spring-19) at Intra University Programming Contest in BRAC University

### Reference

### Sowmitra Das

Lecturer, Department of Computer Science and Engineering BRAC University

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