

Academic CV

Samsil Arefin Mozumder

Date of Birth: 11th September 1996

Nationality: Bangladesh

Present Address: CUMT, WenChang Campus, No.1 Jinshan East Road 221116 Xuzhou, Jiangsu, China.

Mobile No.: +8613160277619

Email: fs22050004e@cumt.edu.cn, samsilarefin313@gmail.com

Research Gate: www.researchgate.net/profile/Samsil-Mozumder

LinkedIn: [linkedin.com/in/samsil-arefin-mozumder-20b20a14b/](https://www.linkedin.com/in/samsil-arefin-mozumder-20b20a14b/)

Profile Link: samsilarefin313.github.io/profile/

Academic Qualification (From the Top Level)

2022-2025	Masters of Science in Mechanical Engineering, School of Mechatronics, China University of Mining & Technology, Jiangsu, China. Would be Graduated in July 2025 90% Marks.
2017-2020	Bachelor of Science in Electrical & Electronic Engineering, School of Science, Engineering and Technology, East Delta University, Chattogram, Bangladesh. Graduated in December 2020 (CGPA 3.26 out of 4.00) 86% Marks.
2013-2017	Diploma in Engineering in Electronics Technology Chattogram Polytechnic Institute, Chattogram, Bangladesh. Bangladesh Technical Education Board Dhaka, Bangladesh. (GPA 3.12 out of 4.00) 62% Marks.
2013	Secondary School Certificate (S.S.C) Board of Intermediate and Secondary Education Chattogram, Bangladesh. (GPA 4.94 out of 5.00) 78% Marks.

Job Experience

Designation: Deputy Field Controller

Department: Engineering

Organization: OPSEED CO., (BD) LTD

Duration: Feb-2020 to Mar-2021

Projects:

- Automatic Ionized Air Blower
- Reverse Harness Detector
- Stack Light Interfacing with Software Writing Machine

- Heat Shrink Tube Cutter Machine Modification.
- OK, NG Indicator Lamp Modification in Sound Check Tester
- Bend Product Check Tester

Industrial Attachment

At Shah Amanat International Airport Chattogram under the department of Communication and Engineering (July 2017 – October 2017)

Publication

- Samsil Arefin Mozumder and A. S. M. Sharifuzzaman. Sagar, " **Smart IoT-Biofloc Water Management System Using Decision Regression Tree**," in *International Conference on 4th Industrial Revolution and beyond (IC4IR)*, Dhaka, Bangladesh, 2021.
- Samsil Arefin Mozumder and A. S. M. Sharifuzzaman. Sagar, " **IRHA: An Intelligent RSSI based Home automation System**," in *2nd International Conference on Ubiquitous Computing and Intelligent Information Systems (ICUIS)*, Tamil Nadu, India, 2022.

Thesis

Title: Intelligent Inspection System for Anomaly Detection in Mining Rail Infrastructure.

A combined approach based on Raspberry Pi machine vision and sensor technology to detect abnormal conditions in rail vehicles inside inclined mining shafts

Honors and Awards

- **Chinese Government Scholarship (CSC)**

I was selected for the most prestigious CSC scholarship for Masters in Engineering at CUMT.

- **Dean List – East Delta University - Summer 2020**

I was selected for the School of Science, Engineering, and Technology Dean's list for maintaining a 3.5 Grade Point Average or above, while taking at least 12 credits during the summer of 2020.

- **Dean List – East Delta University - Fall 2020**

I was selected for the School of Science, Engineering, and Technology Dean's list for maintaining a 3.5 Grade Point Average or above, while taking at least 12 credits during the fall of 2020.

Key skills & Competences

- Electronics, Embedded ML, Machine Vision, Internet of Things (IoT), Robotics.
- Raspberry Pi, STM32, ESP32, Arduino
- C, C++, Python.
- PCB Design (Basic) & Good at Soldering
- Able to plan projects and organize tasks effectively.
- Ability to resolve problems independently & flexible with working hours

Projects:

Analog Projects:

- Implementation of NO, NC only using BJT

- Relay Switching, Water level Indicator, FM Transmitter, Dark Switch
- Timer Circuit, Wave Generator, Auto Water Pump, Clap Circuit
- FM Transmitter, AM Receiver, Relay Switching (Using LM 386, ULN2003)
- Motor Driver Circuit (Using L293D, L298N, TIP 120, TIP 122, IRFZ44)
- Various Sensor Interfacing Circuit (LDR, IR Sensor, MQ Sensors and etc.)

Digital & Programmed Projects:

- Face Mask Detection Based Automatic Gate
- Rubik's Cube Solver Robot
- Face Recognition and Temperature Detection Based Automatic Gate
- Mini CNC plotter
- Voice Control Robot (With 5 Commands)
- Level Sensing Device
- Digital Height Measuring Device
- IoT Based Home Automation
- IoT Weather Station
- Automatic Water Bottle Filling Machine
- Campus Automation
- Electronic Voting Machine
- Interactive Traffic Management System & Realtime Monitoring
- Smart Dustbin with Auto Cap Opening, Visual & Verbal Greeting, Garbage Level Monitoring, and Indication Through GSM
- LoRa Remote Data Acquisition System

Communication skills and competence:

- Native language: Bengali
- Other languages: English- Fluent

Hobbies

When I am free from my routine work, I always keep myself busy with doing other things. I like indulging myself in traveling or visiting places during my leisure or free time. I like to take challenges. I am very much interested in different cultures. I visited the hilly areas of Bangladesh to learn the lifestyle and culture of different ethnic groups. Besides this I also like to spend my free time reading academic writings, playing cricket.