

# KHANDAKER EHSANUL KARIM

BACHELOR OF SCIENCE – ELECTRICAL AND ELECTRONIC ENGINEERING



## EDUCATION

---

### Chittagong University of Engineering and Technology

Chittagong, (2015–Present)

Electrical and Electronic Engineering CGPA: 2.88/4.00 (Final year)

### Savar Cantonment Public School and College

Savar, (2001–2015)

JSC GPA: 5.00/5.00

(2010)

SSC in Science GPA: 5.00/5.00

(2013)

HSC in Science GPA: 5.00/5.00

(2015)

## TECHNICAL SKILLS

---

C, C++, Python, JavaScript, MATLAB, Arduino,  $\text{\LaTeX}$

Basic knowledge on Object Oriented Programming, HTML5, CSS

Also familiar with SQL, git, github, Linux CLI

## EXPERIENCE

---

### Andromeda Space and Robotics Research Organization(ASRRO)

President

CUET (October 2019 - December 2020)

- Organizing Itra-University and Inter-University based technology programs.
- Organizing various seminars and workshops.
- Showcasing our projects in schools, colleges to grow the interest in robotics.

### National Robotics Competition TechnoCraze-2019

Organizer

CUET (October 2019)

I was one of the organizers of National Robotics Competition TechnoCraze-2019 held in CUET. Contestants from different Universities all over the country had participated on the program. There were 3 events in the competition. The events are - Robo-Soccer Competition, Project Presentation, Idea Competition.

## PERSONAL PROJECTS

---

### DX-Ball Clone

(August 2020)

I have created a clone of a popular game DX-Ball using JavaScript while learning about JavaScript programming language. Here I have used [p5js](#) library to draw animation on HTML canvas element.

### Sorting Algorithm Visualization

(September 2020)

It always helps a lot to understand something, when we observe it with our eyes. So I have tried to visualize some common sorting algorithms. In this project I have used JavaScript with [p5js](#) library.

### GIF Search Engine

(January 2021)

This project shows GIF result, as requested by user, by using the web API of two popular GIF website, [GIPHY](#) and [Tenor](#).

### Music Player with SoundCloud API

(January 2021)

This is an online music player. Here users can search their desired music track and also can add to playlist. This project uses the web API of a popular online audio distribution platform, [SoundCloud](#), for pulling music tracks as the user would requested.

### Industrial Automation

(May 2017)

This is an industrial automation project. In this project, two DC motor driven conveyor belts had been used. A robotic hand had been used to move an object from one conveyor belt to another. An IR sensor had been used to sense any object passing the robotic hand. When IR sensor, senses an object, then the conveyor belt stops to roll and robotic arm pick the object and move to the other conveyor belt.

## ACHIEVEMENTS

---

### **RMA Footbot 2017**

(May 2017)

Our team won the 2nd place in this national competition held in Chittagong University of Engineering and Technology and I was the team leader. The competition was about a football game, where two remote/blue-tooth controlled motor driven robots would try to score a goal at the opponent's goal post. We were awarded 15,000 BDT for being Runners Up.

### **NSU Bit Arena 2017**

(August 2017)

Our team won the 1st place in this national competition held in North South University. This competition was same as the previous competition. We were awarded 20,000 BDT for being Champion.

## JOURNEY IN COMPETITIVE PROGRAMMING (ONGOING)

---

I have started Competitive Programming at April 2020. I have solved programming problems from various popular online judges and attended some online contests.

[Codeforces](#)

Problem Solved: 75

[UVa](#)

Problem Solved: 48

[AtCoder](#)

Problem Solved: 16

[CodeChef](#)

Problem Solved: 8

[LeetCode](#)

Problem Solved: 6

## ONLINE CERTIFICATIONS

---

[Programming for Everybody \(Getting Started with Python\)](#)

[Python Data Structures](#)

[Using Python to Access Web Data](#)

[Using Databases with Python](#)

[Capstone: Retrieving, Processing, and Visualizing Data with Python](#)

[Introduction to Programming with MATLAB](#)

[Technical Support Fundamentals](#)

[Introduction to HTML5](#)

[Programming Foundations with JavaScript, HTML and CSS](#)

[JavaScript](#)

## REFERENCE

---

**Dr. Muhammad Ahsan Ullah**

Professor

Head of Electrical and Electronic Engineering, CUET

Moderator of ASRRO

[ahsan@cuet.ac.bd](mailto:ahsan@cuet.ac.bd)

**Md. Saddam Hossain Razo**

Lecturer, CUET

[saddam.hossain.raju.024@gmail.com](mailto:saddam.hossain.raju.024@gmail.com)