

# Md. Omar Faruque Swapon

Job intension: Embedded Software Engineer

linkedin.com/in/shopon16 github.com/shopon16 swapon.sust.eee@gmail.com Mobile Number: 01676899288 H-17, W-04, President Road, Narayanganj- 1400

Sylhet, Bangladesh

April 2016 – June 2022

#### **EDUCATION**

## Shahjalal University of Science & Technology

Bachelor of Science in Electrical & Electronic Engineering

Cumulative GPA: 3.02 / 4.00

• Relevant Coursework: Microprocessor & Interfacing, Digital Electronics, Electronics, Power Electronics, Optoelectronics, Control System Engineering, Electromagnetism, Optics & Modern Physics, Electronic Properties of Materials, Solid State Devices, CMOS VLSI Design.

#### TECHNICAL STRENGTHS

**Programming:** Python, C/C++, JavaScript, Assembly Language. **Framework & Library:** Bootstrap, ReactJS, Django, Arduino.

Software & Tools: MS Word, MS PowerPoint, Adobe Premium Pro, Keil MDK, PlatformIO.

Microcontrollers: ATmega328P, STM32, ESP32, ESP8266.

Electronic Modules: DHT11, HX711 ADC, RFID, GSM900a, RTC DS3231, ILI9341 2.8" TFT

LCD display, QAPASS 1602A LCD, PWM motor driver, Proximity Sensor, Optocoupler.

#### RELEVANT WORK EXPERIENCE

#### Training Institute of Chemical Industries (TICI)

• Experienced hands-on training on electrical safety & protection, power generation & distribution, generator, transformer, motor, and their operations, system measurement, sensing, and control

#### **SUST Mars Rover Team**

- Implemented motor driving circuits and mechanical structure of the main body of the Mars Rover.
- If you are interested to know more. You may click on the link -> <a href="https://youtu.be/f0WCpjbQA1s">https://youtu.be/f0WCpjbQA1s</a>

## Morse code data transmission using LASER

- My responsibility was to develop the firmware for the project.
- Used ATmega328P microcontroller for this project.

#### Disinfection booth

• To stop the spread of the Corona virus, I built this project for the mosque.

#### Employee's working time and wages monitoring system

- used RFID module for the authentication purpose and GSM900a module to send SMS to workers.
- If you are interested to know more. You may click on the link -> https://youtu.be/hblcElmRoDQ

#### **RPM** calculator

Design and develop firmware to get motor RPM.

#### **Digital Weight Scale**

 Designed and develop digital weight scale system using ILI9341 2.8 TFT LCD display and HX711 ADC.

### **Smart Temperature and Humidity System**

• ESP32 and ESP8266 based smart temperature and humidity monitoring system with ILI9341 2.8 TFT LCD display and MQTT protocol.

## **ACCOLADES**

- Attained Championship at Maze Solver Robot Competition in Robo-droid Championship 2016, organized by IEEE RUET Student Branch
- Qualified for participation in European Rover Challenge 2016, Jasionka, Poland.