

CURRICULUM VITAE



MD. HASEMI RAFSAN JANI SHOCHAN

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<https://www.youtube.com/channel/UCCeFDFkFbcEpZzHHkaL9iYg/videos>
- **Github Link:** <https://github.com/Rafsan12345>
- **Linkedin Link:** <https://www.linkedin.com/in/md-hasemi-rafsan-0a4137268/?jobid=1234>

Career objective:

Secure a challenging position within the progressive organization, where I can utilize my experience, technical skills, and creativity. I have proven leadership skills involving managing, developing, and motivating teams to achieve their objectives. I want to give assurance to maintaining high-quality standards.

Personal Information:

- **Name** : Md. Hasemi Rafsan Jani Shohan
- **Father's Name** : Md. Rafiqul Islam
- **Mother's Name** : Most. Masuma Begum
- **Mailing address** : C/o.- Md. Rafiqul Islam, Vill. Borogoli, P.O: Ghoraghat,
- **P.S.** : Ghoraghat, Dist. : Dinajpur.
- **Permanent address** : Vill. Borogoli, Post: Ghoraghat, P.S. : Ghoraghat,
- **District** : Dinajpur.
- **Date of birth** : 20th February 1997
- **Height** : 5'8'
- **Gender** : Male
- **Marital status** : Unmarried
- **Religion** : Muslim
- **NID NO.** : 19972724303000049
- **Nationality** : Bangladeshi
- **Blood Group** : (VE+)

BSC In EEE:

- **Academic Year** : (November 2018 – December 2022)_
- **University** : Daffodil International University
- **CGPA** : 3.10(Out of 4.00)
- **Shift** : Day

Diploma in Engineering:

- **Institute** : Thakurgaon Polytechnic Institute, Thakurgaon.
- **Board** : Technical Education Board.
- **Result** : 3.02(Out of 4.00)
- **Subject** : Refrigeration & Air Conditioning Technology.
- **Roll** : 800594
- **Registration Number:** 769503
- **Session** : 2014-2015

Higher Secondary certificate (HSC):

- **Institute** : Ghoraghat K,c Pilot School & College, Ghoraghat, Dinajpur.
- **Board** : Dinajpur Education Board.
- **Year of Examination:** 2017
- **Result** : 4.00 (Out of 5.00)
- **Group** : Science

Secondary school certificate (SSC):

- **Institute** : Nurzahanpur Retd. Military Colony High School, Dinajpur.
- **Board** : Technical Education Board, Dhaka.
- **Year of Examination:** 2014
- **Result** : 4.38 (Out of 5.00)
- **Group** : Electrical.

Various Software Experience:

- Arduino-1.6.8 and - Arduino 1.8.13 IDE (Basic to Simple Advance).
- AutoCad 2D(Electrical2020 And 2019) (Basic to Simple Advance).
- MATLAB (Basic to Simple Advance).
- LOGO! Soft Comfort For PLC(programable Logic Control Software).
- Proteus ISIS7 Professional (Basic to Simple Advance).
- TinkerCad Software (Basic to Simple Advance).
- Fritzing Project Design Software.
- Adafruit io IOT based Software.
- IFTTT IOT based Software.
- Arduino Cloud IOT based Software.
- Thony IDE and Pycharm (Basic to Simple Advance).
- Pycharm 3.7
- EasyEDA for PCB Design .
- PIC C for PIC model microcontroller.

Research and Project :

Micro-Controller Project:

- Signal Receive And analysis and Controlling From Analog And Digital Sensors.
- Led Controlling Analysis Project By Using Microcontroller ATMEGA328P(Arduino Uno R3).
- Analog Input Output and Digital Input Output signal Receiving and Controlling and Provide by Using Microcontroller ATMEGA328P(Arduino Uno R3).
- Bluetooth based (Home appliance) Control Project by Using HCO5,Mobile App.
- Different Communication protocols project (UART,I2C,SPI) by Using Microcontroller ATMEGA328P(Arduino Uno R3).
- IR(TV) Remote Making and Remote Control Home Appliances by Using Microcontroller ATMEGA328P(Arduino Uno R3).
- Fire Flame Detector project by Using ATMEGA328P(Arduino Uno R3),IR Receiver Sensor.

- GSM(sms and call) based load control Project by SIM800 Module.
- Load Control By PC Or Laptop use UART Communication Protocols Project.
- LCD and 7Segment Display Operating Project .
- PWM technic Project by Using Microcontroller ATMEGA328P(Arduino Uno R3).
- WIFI Jammer and Repeater Making Project.
- Arduino Board Making Project on Bread Board.
- Fire Switch Project(Turn On and off This fire) .
- Signal's Frequency identifier Project by Using Microcontroller ATMEGA328P(Arduino Uno R3).
- LDR Sensor based Automation Project.
- 11KV/400V 2D Substation Design Project in Autocad Electrical For Engineering Drawing(EEE336) Subject's Final Project.
- Bridge Rectifier Based Power Supply's PCB Design Project in Proteus.
- Password Based Load On Off Project by Using Microcontroller ATMEGA328P(Arduino Uno R3).
- Physical Signal To Electrical Signal Converting and Viewing With Signal Plotter Project.
- Software Based (EEE) Math Solving and Conversation Chart(pressure,Tempatature,lendth,Area) Making Project in MS Excell.
- Digital , Analog and PWM Signal Read Write Analysis And Their Controlling.
- Digital Watch Making Project Since 2March 2022 .
- Digital Luxmeter Making Project by LDR.
- Digital Volt meter and Unknown Resistance finding Meter Making Project.
- IR remote Control and Bluetooth Based DC Voltage Dimmer Controlling Module .
- Home Made PLC Module Developing and their control-based on Ladder Diagram.
- I have created an **“Embedded C++ library”** called **“EasyArduino.h”** for ease of use, similar to the popular Arduino coding reference in PIC Microcontroller Activity.
- MODBUS Communication Activity.
- AVR and PIC Microcontroller activity.

Link: <https://github.com/Rafsan12345/Micro-Controller-.git>

Machine learning and Hardware Data Collecting based Project

- Using Cool Term Software for data analysis and collecting ,
- Using Microsoft excel Software for data analysis and collecting ,
- Using PLX-DLX Software for data analysis and collecting ,
- Using Adafruit io platform for data analysis and collecting through internet ,
- **“Hardware based Machine Learning(Average, CVS file handling, Data plotting, future value predicting and Data Regression)”** on my respiratory(temperature and humidity) for ten seconds activity based project in python from DHT11 Sensor.
- Date, fault time and number of fault based Machine learning project on **“Switch gear”** and protection equipment.
- **“Specific Face Detecting and Matching percentage finding project”**
- **“Face mask Detecting project”**

Link: <https://github.com/Rafsan12345/Data-Analysis-Machine-Learning.git>

Link: <https://github.com/Rafsan12345/Python-With-Embedded.git>

Micro controller based Industrial Controlling Project

- IR remote Control and Bluetooth Based DOL(Direct Online Stater) Controlling Module .
- IR remote Control and Bluetooth Based Reverse and Forward Controlling Module .
- IR remote Control and Bluetooth Based Star and Delta Controlling Module .
- Microcontroller Based ATS (Auto Change over Switching Module).
- IR remote Control Industrial DC Voltage Regulator.
- IR remote Control Based Industrial relay and Magnetic conductor Controlling.
- IR remote Control Based Industrial Change over Switch.

- IR remote Control Based Industrial State remembering Switch.
- Variable resistor based industrial Channel Changing or Load Changing project.
- Increasing and decreasing value uses based industrial load Control and load selector point making project.
- Under and over frequency Monitoring system and their control project .
- ON and Off time Selecting delay input based industrial timer switch making project.
- Time Selecting Load Control in Seconds Making project.
- Industrial Motor Controlling and Analysis ability type Ladder Sketch drawing project for “PLC”.
- **Digital frequency Meter** Making project and frequency based Load Control in Proteus.
- Cyclo Converter based “VFD” Design and simulation in Proteus.
- Optocoupler based “zero crossing detector” Design in Proteus.
- “**Electronics AC Voltage Dimmer**” or phase angle control Circuit Design in proteus.
- “**Digital Power factor Meter**” Design in proteus.
- “**Digital Overload Protector**” Design and Implement based project(Set, Reset, Auto Reset, Auto Set from previous set value, and Ability to delay taking action).
- “**Solid State Relay**” Circuit Design in proteus.

Link: <https://github.com/Rafsan12345/Industrial-Control.git>

IOT (Internet Of Things) Based Project:

- Smart IOT Based Attendance Data logger System Project Using AdafruitIO Server.
- Smart IOT Based Home Automation System Using Arduino Cloud .
- IOT Based Load Controlling System by Social Media.
- IOT Based Load Controlling by using GSM Communication Protocols.
- IOT Based Load Controlling by using Android Device Applets.
- IOT Based Load Controlling by According Year, Month, Time And Date.
- Google Assistant based Voice and Writing Command (Load Control) IOT Project by Using NodeMcu ESP8266 .
- Internet based (Load Control) IOT Project from Any place of Earth by using NodeMcu ESP8266,AdafruitIO.Software
- Blynk App based (Load Control) IOT Project by Using NodeMcu ESP8266 .
- IOT Based Sensors Data Collecting and Storage and Controlling by Various iot Platform and services .
- IOT Based Solid State Relay Designing in Proteus.
- IOT Based Controlling on Load on off State.
- IOT Based Load Controlling on Temperature and Humidity State.
- IOT Based Load Controlling on Phone Charging State.
- IOT Based Weather (Temp & Humi) Monitoring Automatic Data Logger in Google Drive Services.
- IOT and Remote control Based Industrial Motor Controlling Switching Module .
- IOT Based Smart Traffic Light Controlling System .
- IOT Based Medical And ICU Instruments Switching Module.
- IOT based Smart Irrigation Controlling Module.
- Webserver based Microcontroller Controlling project .

Link: <https://github.com/Rafsan12345/Internet-of-Things.git>

Python and Micro-python language Based Microcontroller Project:

- UART communication path creating python to Microcontroller in Pycharm.
- EEE Calculator making project in Pycharm(running).
- Finger Counter-based Load Control in Pycharm.
- Password \ Specific Code Based Load Control in Pycharm and Micropython.
- DHT11 sensor data read and printed in Thonny IDE.
- GPI\O, PWM, Digital, and Analog input output Sketch writing and their control based project in Micropython.
- IOT-based Home Automation using Socket programming in Micropython.
- Micropython-based Data sending and data receiving and load control through IOT

platform Adafruit and IP 191.168..... link Protocols.

- Micropython-based Web request sending project.
- UART Communication write based project in micropython.
- Key-board and External buttons based like the “**EVM**(Electronic voting machine)” project in Micropython (Re-voting, NID and total vote checking ability) use thonny IDE.
- Python and Micropython self Library Creating and uses ability type project.
- **Increasing, Decreasing, and Set Reset-based** Load Controlling in Micropython.
- Wifi-based **Digital Watch** Making from NTP server with LCD display by using micropython.
- I have created an “**Embedded MicroPython library**” called “**EasyPython**” for ease of use, similar to the popular Arduino coding reference.
- Self-made “**Voice Assistant with Load Control**” Using Python Voice protocol like googleassistant.

Link: <https://github.com/Rafsan12345/Micropython.git>

Link: <https://github.com/Rafsan12345/Python-With-Embedded.git>

Computer Vision and image processing project

- “**Face detecting load control**” Using python CV2 and Mediapipe protocol.
- “**Hand detecting load control**” Using python CV2 and Mediapipe protocol.
- “**Web Cam or IP link Based Face and Hand Detecting Load Control**”.
- “**Human Face Detecting Based Computer Automatic Shutdown**” project.
- “**Object Color Detecting**” project.
- “**Security Camera with object movement detecting**” project
- “**Image or Video processing based Smart Solar trucking**” project
- “**Image text to string text converting**” project
- “**New and Old Money Identification**” project on ticket machine problem of Dhaka metro rail.
- **Image contours find and their operation type project.**
- “**Car Number plate Detection**”
- “**Finger gap Detecting based Fan regulator and display leveling or volume control Model**”
- “**Number of coin and shape contours detecting project**”
- “**Smart Car parking based Free space counting and detecting**”
- “**Simple Non-Electric cork sheet Board Converted to Touch screen board project based on image processing**”
- **Gesture Control AC Voltage Angle Regulator**
- **Attempts have been made to create a system similar to HMI and SCADA.**
- **virtual steering wheel and speed control System for a Robot Control Vehicle/car by only hand Gesture Movement**
- **QR and BQ Scan and Implement in Computer vision activity.**

Link: <https://github.com/Rafsan12345/Computer-and-Robotics-Vision-.git>

Embedded Control Software Development Project

- “**Industrial Power factor Calculator**” project
- “**IP link-based Object Movement Detector and Image capture**” project
- “**Password-based Embedded Controller and Home Automation Connector**”
- “**Solar System Calculator 0.1**”

Link: <https://github.com/Rafsan12345/Software.git>

AutoCAD Electrical and PCB Design Project

Link: <https://github.com/Rafsan12345/AutoCAD-Electrical-Desing.git>

Link: <https://github.com/Rafsan12345/PCB-Design.git>

Embedded Control Library Development Project

- **EasyArduino.h** for PIC Microcontroller Series.
- **EasyPython.py** for Micropython Activity .
- **Gas.h** for AVR Microcontroller Series.

Link: <https://github.com/Rafsan12345/Library.git>

Training Experience:

- EIM(Electrical Installation and maintenance) Course From Brac Institute Of Skills Development (ISD) Since 2018.
- RAC(Refrigeration & Air Conditioning) Course From Brac Institute Of Skills Development (ISD) since 2018.
- 360 Hour Basic Course on Refrigeration & Air Conditioning From Thakurgaon Polytechnic Institute, Thakurgaon since 2017.
- Basic Computer Skill Course from “IT LEARNING CENTER” Thakurgaon since 2017.
- Industrial Training (After Diploma Education) from ISD since 2018.
- Basic Electronic Course From TTSC(Thakurgaon Technical School And Collage) since 2015.
- “Journey with Raspberry” Training Course From Daffodil Robotics Lab Since 25 March 2022.
- "Industrial Microprocessor ARM1768 and Sensors” Control Training From Daffodil Robotics Lab Since 27 May 2022.
- Asics of Artificial Intelligence” Course from “Robi 10 Minute School”.
- “Fire Safety Awareness” Course from “Robi 10 Minute School”.
- One-day Industrial Tour at Ashuganj 225MW Power Station.

Project Link And Reference:

- <https://github.com/Rafsan12345/Micro-Controller-.git>
- <https://github.com/Rafsan12345/Induestrail-Control.git>
- <https://github.com/Rafsan12345/Internet-of-Things.git>
- <https://github.com/Rafsan12345/Micropython.git>
- <https://github.com/Rafsan12345/Python-With-Embedded.git>
- <https://github.com/Rafsan12345/PLC-programming.git>
- <https://github.com/Rafsan12345/MATLAB-Design-.git>
- <https://github.com/Rafsan12345/Design-Section.git>
- <https://github.com/Rafsan12345/Data-Analysis-Machine-Learning.git>
- <https://github.com/Rafsan12345/Software.git>
- <https://github.com/Rafsan12345/Computer-and-Robotics-Vision-.git>
- <https://github.com/Rafsan12345/AutoCAD-Electrical-Desing.git>
- <https://github.com/Rafsan12345/PCB-Design.git>

