CURRICULUM VITAE



MD. HASEMI RAFSAN JANI SHOHAN

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➤ **Facebook** https://www.facebook.com/Hasemi.Rafsan.849/

➤ WhatsApp Number : 01784032595

> YouTube:

 $\underline{https://www.youtube.com/channel/UCCeFDFkFbcEpZzHHkaL9iYg/videos}$

➤ **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
 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 : BangladeshiBlood Group : (VE+)

BSC In EEE:

Academic Year
 University
 : (November 2018 – December 2022)
 : 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(Electrical 2020 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 7Sigment 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.

<u>Link:</u> 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 angel 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/Induestrial-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.

<u>Link:</u> 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

- platfromAdafruit and IP 191.168..... link Protocols.
- ➤ Micropython-based Web request sending project.
- ➤ UART Comunication write based project in micropython.
- ➤ Key-board and External buttons based like the "EVM(Electronic voting machine)" project inMicropython (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 Voce protocol like googleassistant.

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

<u>Link:</u> 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

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

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.
- ➤ Induestrial 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/Induestrial-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