## MOHAMMAD ABDUL AFROZ

 $9652015372 \diamond Hyderabad, T.S$ 

asi.afroz2005@gmail.com \leftharpoonlin/md-abdul-afroz \leftharpoonlin/github.com/abdulafroz04

#### **OBJECTIVE**

Undergraduate in Electronics and Communication Engineering. Highly motivated and adaptable individual with a passion for continuous learning and growth. With excellent problem-solving abilities and a keen attention to detail, I thrive in challenging environments and excel at tackling complex tasks.

#### **EDUCATION**

B.Tech in Electronics and Communication Engineering, JNTUH-UCESTH, Hyderabad

Expected 2024

CGPA: 8 Aggregate

MPC - Intermediate, Sri Nalanda Junior College, kothagudem

2018 - 2020

10th CGPA: 9.7/10

Aggregate IPE percentage: 96.60Secured 1252 in TS-Eamcet out of 1.4lakh+ candidates.

Secured 96.98 percentile in JEE Mains-2020

#### **SKILLS**

Technical Skills Digital Logic design, Microcontroller and Microprocessor Programming

Embedded Systems, Digital Signal Processing (DSP), VLSI Design

Network Protocols, FPGA Programming

Languages C, C++, Python (Programming essentials), Embedded C, Data Structures

and Algorithms

## **EXPERIENCE**

## Hardware Engineer Internship

January, 2024 - Ongoing

Honeywell Technology solutions lab

Bangalore, Karnataka

- I have been testing WLAN for various test conditions such as secuirties, roaming and basic sanity tests for various devices.
- I have been alloted a project which is based on a Micro-controller with WiFi that is to be integrated with peripherals and a RFID reader.
- I have been learning regarding the working of printers.

## Design Internship

Feb 2023 - Mar 2023

Mayen Silicon

Hyderabad, Telangana

- Managed a process re-engineering project to improve and consolidate end-to-end service processes; restructured communication flow among 10 departments and cut down paperwork by 75
- During the Internship I have encountered following tasks:
  - 1. Learning about various devices.
  - 2. Functions of the devices as Master and Slave.
  - 3. Bridge connection for communication between devices.
  - 4. Various Testing conditions.
- Achieved more knowledge on the interfacing of devices using VERILOG.

## FPGA Architecture Design Internship

June 2023 - Ongoing

Pan Tech Solutions

Hyderabad, Telangana

- I have been learning FPGA design using VHDL.
- Various tasks are been assigned in the intern that provide experience in various test conditions and logic designing.

• Futher FPGA design using python and many more tasks will be assigned

# Embedded System and IoT Intern

EmertXe

August 2023 - October 2023 Hyderabad, Telangana

- Coding of various devices using Embedded C.
- Interfacing of devices with Automation using C Language.

#### **PROJECTS**

Multi Channel MAC Protocol: A Multichannel Medium Access Control (MAC) Protocol enhances WSN performance by efficiently allocating and utilizing multiple communication channels. The simulation-based approach allows for testing and optimization of the protocol's parameters, leading to a deeper understanding of its behavior in different scenarios using MATLAB (Try it here)

AHB to APB Bridge Design: The AHB to APB bridge is an AHB slave, providing an interface between the high speed AHB and the low-power APB. The project is implemented using VERILOG. (Try it here)

Voting Machine using VERIIOG A voting machine is being designed and implemented using verilog. The various modes and control switches are being instructed and controlled. Upon completion the tallying of votes is also done using the TALLY mode.

**PWM using VERILOG:** Designed and implemented a PWM (Pulse Width Modulation) controller using Verilog using XILINX VIVADO HLX. Developed logic for generating precise digital signals to control the duty cycle and frequency of the output waveform Demonstrated proficiency in Verilog coding, simulation, and synthesis on zedboard zynq 7000. (Try it here)

Microwave Oven Simulator: The microwave Oven simulation is done using Embedded C language. The Microwave Oven is implemented using PIC microcontroller. Interfacing of CLCD, Buzzer, Fan with PIC microcontrollers. Various modes in microwave oven are being done.

## Pattern Pursuit:

- 1. Learnt Arduino coding for joystick, LED, pushbutton.
- 2. Learnt of different inbuilt functions of Arduino.
- 3. Usage of a joystick with the directions and angles providing sensitivity to movement.

## **LEADERSHIP**

- A student and member of IEEE Student Chapter.
- Crew foreman for JHUB.
- A scholar for **FOUNDATION FOR EXCELLENCE**.
- Team Leader for **AASYA FOUNDATION**. I have been a part of the organization for more than 2 years and I have been involved in various activies. These activites have helped me in hoaning my communicational skills, management skills and presentation skills.