#### **Mohammad Azharuddin**

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#### **Career Objective**

3rd year B.E student of Electronics and Communication at University Institute of Engineering and Technology, Panjab University. Inquisitive, hard-working and consistent. Very interested in making projects related to electronics and Robotics and looking forward for an internship in Robotics.

#### **Education**

Degree	College/School	University	Passing Year	Pass Percentage
10th Class	Kendriya Vidyalaya sector 31 chandigarh	CBSE(Board)	2014	10 CGPA
12th Class	Kendriya Vidyalaya Sector-31 Chandigarh	CBSE(Board)	2016	89
BE ECE(3rd year)	University Institute of Enginnering and Technology	Panjab University	2020	7.85(CGPA)

#### **Projects**

- 1. **Autonomous Crow Robot:** Made the robot from scratch which works like thirsty crow in the jungle, picking the pebbles(metallic balls) and placing in the the pitcher(specific area on the area). This story is brought into reallity on the screen using augmented Reality Technology.
  - Technology/Tools: Embedded C, OpenGL, Path planning, OpenCV, XBee communication, Python
- Youtube Link: https://www.youtube.com/watch?v=DdPGsyRq<sub>I</sub>w feature = youtu.be
- 2. Wire Extrusion: Involved with the electronics aspect of Extrusion machine. Combined the working of three stepper motor used in the machine on one single microcontroller(Arduino nano) and made a seperate module for this. Contorlled The speed of the motors using the inbuilt timers of Arduino nano. Desined a mechanism for sweeping the wire on the spool(circular thing on which wire is wrapped) uniformly using a switch and interrupt.
  - Technology/Tools: Embedded C, Arduino IDE
  - Video link: https://drive.google.com/open?id=1QfjfdG8ZZFpbYy9xYUHKUDQQ1lk6nkva

- 3. **Bite Force(Collaboration with GMCH-32 Hospital):** Worked on developing a module for the doctors which can measure the force of teeth while the patient bites using the pressure sensor and determining various health, hygine, disease and recovery of the tooth after any surgery. Also I interfaced an OLED on the module only which shows values of pressure from the tooth at the time of bite only and also the doctor can later recollect the values of the patients of which the bites have been taken later on also. This is done using the EEPROM memory of the Arduino nano.
  - Technology/Tools: Arduino IDE
  - **Report link:** https://drive.google.com/open?id=18qXjPWVtBbSYwQGmHe48f0wIXmOOmh3-efq-MZuRBbI
- 4. Password Based Door Lock:

Worked on Password Based Door Lock System using 8051 Microcontroller using Embedded C in Keil.

- Technology/Tools: Keil, Embedded C, 8051 development kit
- Link: https://drive.google.com/open?id=1YzH3cSRm4CVV6TAUyOUlbocSX6CXINPj
- 5. **Bus on Time(Currently working):** Made a device module which fitted on the bus, will keep sending the GPS location to the Google sheet using the nodeMCU. The coordinates send by the bus will now be fetched from the google sheet and then processes by the backend programme which will keep updating the bus location in the database of the programme and when any user wishes to know the position of the bus he will enter the bus no. and the bus cuurent location will be shown to him.
  - Technology/Tools: Arduino IDE, Javascript, Python, Sheetsu

# Training and Internship

- Intern at DESIGN AND INNOVATION CENTER: Initiative By MHRD(Gov.of India) on collaborative research and innovation PU, Chandigarh, India (Jun 18 Aug 18) Learnt about the various inbult registers of the ATmega 328 and made a project using the timers and interrupts of Arduino.
- C Programming Training

  Learnt fundamentals of programming

(Jun 17 - Aug 17)

Training activity Under college Programme
 (June 2017)

 Learnt Arduino, Motor Driver, Sensor Interfacing, Arduino IDE and made a project Automatic Floor cleaner which as the name suggest cleans the floor by interfacing with Ultrasonuc sensor and DC motor

#### **Research and Publications**

None

#### Websites work

- **Hackerrank**: https://www.hackerrank.com/azharcaptain20
- Hackerearth: https://www.hackerearth.com/@mohammad557
- Linkedin: https://www.linkedin.com/in/mohammad-azharuddin-30a494147/

### **Technical Skills**

- Software: Embedded C, Python, C++, C, Atmel Studio
- Hardware: Arduino, AVR mC, Spark V kit, Firebird V kit, Various Driver Modules and Sensor Modules
- General: Data Structures, Algorithm

#### Soft Skills

- 1. Problem solving
- 2. Team work
- 3. Team Leader
- 4. Always Learning attitue

#### **Extracurricular activities**

- Worked as a volunteer for Rotaract Club of UIET for an event 'Helping Run' which was organised for NGO Gur Asra Trust, Palsora.
- Worked as volunteer in Marketing team of Goonj fest organized in UIET,PU 2017.

### Co-curricular activities

- 1. Group leader of college electronics group: Embedded Group of UIET,PU
- 2. Help to flourish electronics environment in college and e-Yantra Lab(initiative by IIT Bombay) in college
- 3. Organized electronics hackathon on North India level.

#### **Personal Details**

Father's Name: Riyaz Ali Mother's Name: Tasneem

Sex: Male

Date of Birth: 20 February 1999

Nationality: Indian

Martial Status: Not Married

## Reference

• None

## **Declaration**

I do hereby declare that above particulars of information and facts stated are true, correct and complete to the best of my knowledge and belief.

#### **Date**

17th-April-2019