# **BHARGAV DHARMENDRA CHAUHAN**

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### **EDUCATION**

### **Master of Science in Embedded Systems Engineering**

2021 - 2023

University of Colorado Boulder, Boulder, CO

Relevant Coursework: Embedded Sensors and Motors, Practical PCB Design and Manufacture.

### Bachelor of Engineering in Electronics and Telecommunication Engineering

2015 - 2019

Dwarkadas J. Sanghvi College of Engineering, University of Mumbai, India

Secured Distinction with GPA: 8.73.

Relevant Coursework: Analog and Digital Electronics, Microprocessors and Microcontrollers, Integrated Circuits.

#### **TECHNICAL SKILLS**

- Programming Languages: C | C++ | Python | JAVA | DBMS.
- Design and Simulation Software: MATLAB, Altium, CAD Eagle, Keil uVision IDE, Proteus, Arduino IDE, Selenium, Eclipse.
- Microprocessors and Microcontrollers: Intel 8085, Intel 8086, 8051, ATmega328P, ATmega32A, ATtiny2313.
- Embedded Platforms: Arduino series, Cypress PSoC, PCB routing, Bluetooth module, ESP8266 Wi-Fi module.

#### **EXPERIENCE**

# System Engineer, INFOSYS LTD., Mysore

2019 - 2020

- Learned new programming languages and software such as Python, Java, Database Management, and Selenium to build an understanding of software industry.
- Coordinated with team of 4 on Selenium Webdriver, formulated browser-based regression automation suites and tests, completing the script prior to deadline and testing the client's website.
- Experienced the insights into the operations of an established, professional firm, while further allowing to devise ability to work in teams, communicate and manage time and resources to complete tasks optimally.

#### Research Lab Assistant, Value Plus Enterprises Private Limited, Mumbai

2020 - 2020

- Researched with 1 other intern about the various areas and facets of LED testing such as selection of timer and counter, variac transformer and contactors.
- Researched and tested various models of constant current LED drivers to output current of 300 and 1500 mA for desired level of light output.
- Played a key role in designing newer 50- and 100-watt models of LED lighting inline with market requirements.

# **ACADEMIC PROJECTS**

### HAND GESTURE VOCALIZER FOR THE SPEECH-IMPAIRED

05/18 - 06/19

- Developed a speech synthesizer leveraging the microcontroller ATmega32A, translating the gestures to audio and visual output. The prototype model included flex sensors giving signals to the microcontroller selecting from pre-coded 9 inputs.
- Accomplished the designing of the circuit on the software and modeling the hardware components on the PCB board, programming the system employing Atmel studio, and converting the program to assembly language.

#### **HOME AUTOMATION USING SENSORS**

01/18 - 05/18

- Prototyped a development board integrated with sensors, 8-bit AVR microcontroller ATmega328p and 6V relays to control the appliances based on the sensor outputs.
- Combined various sensors such as PIR sensor, IR sensor, LM35 temperature sensor and LDR sensor and interfaced into a PCB board while programming the components in C language to function synchronously with each other.

# WIRE CUTTING MACHINE

07/17 - 10/17

- Designed a project one automatically cuts copper wires based on the given input length and quantity.
- Implemented the prototyping o PCB with Eagle software, and hardware assembling with electric components. Studied and utilized the concepts of Stepper and Servo motor and analyzed various designs to implement the mechanical model.

### MINI CNC PLOTTER

03/17 - 12/17

- Modeled a CNC plotter machine, writes text or draws images by using a pen on the provided solid surface.
- Build a model with extensions incorporating lazer module and 555 motor to route 2D designs on various surfaces.

#### **CERTIFICATIONS**

- Hand Gesture Vocalizer for the Speech-Impaired, International Conference on Wireless Communication, October 11-12, Accepted for Springer Digital Library and published in the "Proceedings of International Conference on Wireless Communication" with ISBN: 978-981-15-1002-1.
- Certification of Participation in ICWiCOM 2019 conference.
- Development Board for Home Automation Sensors. DJ Spark, 2018. ISBN: 978-93-86724-75-5.
- Ranked 4th in the competition DJ STRIKE 2018 held by the department consisting of 30 teams.