

# CHIRAG HEGDE

Subhash Nagar A Wing, N.M Joshi marg, Mumbai 400011



+91-8291253415



chiraghegde101@gmail.com

## EDUCATION

**Fr. Conceicao Rodrigues College of Engineering** (Score : - 8.86 CGPA)  
Bachelor's of Engineering, Electronics  
Mumbai, India

Aug. 2018 – May 2022

**Khar Education Society** (Score :- 79.38%)  
Higher Secondary Education  
Mumbai, India

Aug. 2016 – May 2018

## PROJECT

**Portable Survival Kit** | AutoCad, Arduino design

2021-2022

- Design and development of a Survival kit to survive in a catastrophic high health risk environment.
- Breathing Aid: Developed air purifier that would filter 30000 liters of contaminated air and eliminate contaminants such as pm 2.5
- Using only 376g of zeolite, a chamber of zeolite 13x grade was designed and simulated to absorb pure oxygen from the environment and store it for 2.5 hours.
- Water filter system: The Water system with UV chamber designed and automated using solenoid valves which could purify 200 ml of water in 10 seconds.
- Heating Mechanism: Designed a heater using Ni-chrome wire and white cement casting and simulated to achieve 7  $\Omega$ . Coil designed to achieve a power consumption to 144 W.
- Concept design of a Ni-chrome wired jacket to keep the user warm in extreme climatic conditions.
- Tracking system: Developed SOS system using GPS, GSM technology and Arduino uno used for location tracing.  
In Future LORA could be implemented, thus eliminating the disadvantages of GPS.
- Battery Management System: Design and fabrication of BMS and used simulation technique to increase the capacity to 11400mAh.

**Sign language recognition system** | ML, AI, Raspberry Pi 3 B+, Edge Impulse

2020 - 2021

- Developed a Sign language recognition system for those who are deaf or hard of hearing for easy communication.
- Created a database with 452 images depicting gestures corresponding to English alphabets
- Using ML techniques to test and train data we achieved 61 percent accuracy, which was later enhanced to 92 percent by adding more data
- Developed Hand gesture detection system using Raspberry Pi 3B+
- Simulated the gestures using Edge Impulse connected to the ML algorithm to detect relatable alphabets ready for Display
- In future it could be developed into a system for Gesture-to-Voice delivery using Raspberry Pi, thus enhancing user interface and achieving higher accuracy.

## SKILLS

Circuit Design, Soldering, JAVA, HTML, CSS, SQL, Raspberry Pi, Automation and Simulation AutoCAD, Microsoft office

## ACTIVITIES

**Robocon CRCE** |

2019-2020

- \* Rugby Playing BOT
- \* Design and development of E-Circuits for BOT
- \* Design and fabrication of circuit and wiring system
- \* Designed and fabricated KICKING and GRIPPING mechanism

**Siddhivinayak milk Suppliers** |

2020-2021

- \* Milk Tank level indicator
- \* Glowing a red bulb when tank level gets full using components such as Ball Float & Limit switch.
- \* Thus making it easier for the plant operators to manually operate the pump.
- \* Further it could be developed for automation of milk pumps, for filling the tanks.

## IMPORTANT LINKS

LinkedIn:  <https://www.linkedin.com/in/chirag-hegde-6068551b9/>

Github:  <https://github.com/Chirag2810>

Hackerrank:  <https://www.hackerrank.com/chiraghegde101>

