Postgraduate First Year Mumbai, India

# Qualifications

B.Sc in Information Technology. (CGPA: 8.6 / 10)

## **Projects**

#### **Autonomous Maze Solving Robot**

[2018-2020]

Technical team of students

Mumbai

Was a part of a team of undergraduate students that built an autonomous robot that would explore and then solve a maze by finding the shortest path from the origin to the destination.

- Designed and implemented the mechanical chasis of the robot.
- Designed and implemented the electronic circuitry needed to drive the on-board motors and transfer the infrared sensor data to the processing system.
- Programmed the on-board Arduino to first explore the maze and then designed an algorithm to use the collected data to find the shortest path to solve the maze.
- Participated in the IIT-Bombay Techfest's Mazerunner competition in 2015, 2018 and 2020.

Covidfaq.net [Spring 2020] Mumbai

- Backend Development
- Worked with a team on building the API: CovidAPI.info to empower other developers to get access to statistics related to the Covid-19 pandemic.
- As a backend software developer, built a chatbot that replies to a user's queries regarding the virus and spread of Covid-19.

## Smart Ambulance Monitoring System

[Spring 2020] VSIT, Mumbai

Course Project

• Designed and implemented a system that would send data on critical health indicators from an ambulance to a hospital via SMS. This is intended to help the doctors prepare before a patient arrives.

- Used an Arduino to take input from health sensors and GPS, and send the data using a GSM Module (Global System for Mobile) and the MQTT messaging protocol.
- Used the Node Red IOT platform to integrate the entire hardware system.

## Website to display data for Covid-19

[Spring 2020]

Independent project

Mumbai

- Designed and implemented, using R, a website to display the data regarding the Covid-19 virus and its spread in a user-friendly manner.
- Website: https://rusty3699.shinyapps.io/covid19\_dashboard

### **Publications**

- Subjugation of Humanity by AI A research paper elaborating how self-enhancing and self-replicating artificial intelligence may take over humans before we know it.
- Smart Ambulance Monitoring System for the National Level Student Research Paper Conference

# **Technical Skills**

**Programming** C++, R, Python (including TensorFlow, OpenCV, Selennium and mat-

plotlib), C, Java

**Implementation** Machine Learning, Image Processing, Android App development

Software and OS Windows, Linux, Github, Microsoft Office

#### Courses Undertaken

Computer science Machine Learning (Online Stanford course on Coursera), Operat-

ing Systems, Object Oriented Programming, Web Programming, Python Programming, Data Structures, Computer Networks, DBMS, Software engineering, Core Java, Security In Computing, Business Intelligence, Software Quality Assurance, Principles of Geographic

Information Systems

**Electronics** Digital Electronics, Microprocessor Architecture, Embedded Sys-

tems

Mathematics Discrete Mathematics, Numerical and Statistical Methods, Applied

Mathematics, Computer Oriented Statistical Techniques

### Extracurriculars and other interests

• Bagged the runner-up achievement award in HackDown, a codathon organised by IEEE-VSIT. (2020)

• Acquired a Certificate of Completion of C training - IIT-B Spoken tutorials project.

• Participated in Angel Hack Hackathon. (2019)

• Stood first in an intercollegiate Quiz competition. (2018)

• Stood Second in Maharashtra Govt. Under 17 Badminton Tournament. (2015)

• Stood First in IIT-B Techfest Scholastic competition. (2014)

• Stood First in F/N ward Level Science Exhibition Competition. (2012)