# SOUJANYA AVADHANI M D

#9 KT-45, Vijay Apartments, #103, 16th cross, between 8th and 6th main, Malleswarm, Bangalore, 560-055, Karnataka.

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### **CAREER OBJECTIVE:**

To work with an organisation where I can effectively utilize and contribute my skills and ideas towards the organisation's goals and develop my career.

# **EDUCATION:**

| Qualification    | Year of completion | Institution      | University  | Percentage of marks |
|------------------|--------------------|------------------|-------------|---------------------|
| B.E.             | 2020               | R.V. College     | Autonomous  | 9.72                |
| (Electronics and | (pursuing)         | of Engineering   | -Affiliated | (CGPA - 3           |
| Communication)   |                    |                  | to VTU      | semesters)          |
|                  |                    | Vidya Mandir     | Karnataka   |                     |
| P.U.C.           | 2016               | Independent      | State Board | 98.16%              |
|                  |                    | P.U. College     |             |                     |
|                  |                    | Sri Vidya Mandir |             |                     |
| S.S.L.C.         | 2014               | Education        | KSEEB       | 98.72%              |
|                  |                    | Society          |             |                     |

#### PROJECTS:

# 1. Planter Bot (December, 2017 to March, 2018):

This project was undertaken as a part of E-Yantra Robotics Competition - 2017, IIT Bombay.

### **Project Objective:**

- (a) To traverse different zones in the given arena with the help of image processing.
- (b) To overlay the corresponding 'seedling images' on 'plantation backgroungd' image depending on the number of 'colour markers' detected.

### Roles and Responsibilities:

Contributed to building the chassis and algorithm of the project.

### Challenges:

- (a) Image Processing
- (b) Shadow and Glare Removal
- (c) Path and Zone Differentiation
- (d) Switching algorithms for following black and white paths
- (e) Image Overlay

# 2. Greenhouse Monitering System(September, 2017 to November, 2017):

This project was undertaken for self-study during third semester.

#### **Project Objective:**

- (a) To moniter a greenhouse remotely with the aid of IoT technology.
- (b) To automatically regulate the temperature, humidity, soil moisture conditions within the greenhouse.

#### Roles and Responsibilities:

Contributed to algorithm amd code of the project. Also designed a prototype of the green-house.

#### Challenges:

- (a) Interfacing a LCD Display to Raspberry-Pi
- (b) Interfacing the temperature humidity sensor, ldr and soil moisture sensors
- (c) Effectively reading the input data from the sensors
- (d) uploading the read values to a local cloud

(e) setting thresholds to switch on the regulatory systems

# Grid Solver Bot(May, 2017 to June, 2017):

This project was undertaken to exhibit during Srushti Exhibition - 2017.

### Project Objective:

To build a robot which traverses to a partical location upon specifying the x,y co-ordinates of the location.

#### Roles and Responsibilities:

Contributed to algorithm amd code of the project.

### Challenges:

- (a) To interface IR sensors to arduino
- (b) To write efficient path traversing and direction alignment algorithm to take the shortest path to reach the specified location
- (c) To make the bot bluetooth controlled

### TRAINING AND INTERNSHIP:

- Trained in building a line follower using Arduino at Astra Genesis 101 workshop, RVCE.
- 1 month working experience on Raspberry pi, at technical club Astra, RVCE.
- Trained in image processing using Open CV Python, at E-Yantra, IIT Bombay.

### TECHNICAL SKILLS:

• Programming language: C, Python

• Platforms : Windows, Linux

• Boards: Arduino, Raspberry pi

#### SOFT SKILLS:

- 1. Time management
- 2. Team work
- 3. Strong work ethics

### **EXTRA-CURRICULAR ACTIVITIES:**

- Chanting Shlokas, Bhagavad Geetha
- Singing

- Playing badminton
- Embroidery works
- Playing chess

### **CO-CURRICULAR ACTIVITIES:**

- 1. Learning Robotics
- 2. Programming in Python
- 3. Interested in Internet of Things

### PERSONAL INFORMATION:

Fathers Name : Dattatri M S Mothers Name : Ramashree H G Date of Birth : 3rd March, 1998

Sex : Female Nationality : Indian Marital Status : Single

Languages Known : Sankethi, Sanskrit, English, Kannada, Hindi

### **DECLARATION:**

I hereby declare that all the above mentioned information given by me is true and correct to the best of my knowledge and belief.

Date : Bengaluru

Place: 17th April, 2018