# 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