Gokulakrishnan D P

SOFTWARE ENGINEER

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Summary

A curious developer seeking to learn more on robotics.Experienced in networking,motion planning,and control algorithms.Super nerd who loves Vim, Linux and enjoys to customize all of the development environment.Active particiption and contribution to open-source community. Interested in devising a better problem-solving method for challenging tasks, and learning new technologies and tools if the need arises.

Education

Bannariamman Institute of Technology   *Sathy, Tamil Nadu*

BACHELOR OF ENGINEERING IN MECHATRONICS, CGPA: 8.71/10.0   *May 2023*

The Optimus Public School   *Erode, Tamil Nadu*

SENIOR SCHOOL, PERCENTAGE:80.4/100.0   *March 2019*

The Optimus Public School   *Erode, Tamil Nadu*

SECONDARY SCHOOL, PERCENTAGE:9.2/10.0   *March 2017*

Skills

Languages	Python,C,C++
Frameworks	ESP-IDF,ROS,RTOS
Documentation	Latex,Markdown,HTML

Projects

Vantage

C++

- A terminal user interface for Lenova laptops
- uses acpi interface to control lenova's baterry operations
- 🐙 Vantage

Solar monitoring

FLUTTER AND RTOS

- Real time data monitoring of solar inverters with public mqtt broker
- Public communication over mqtt
- App to display all the parameters sent over mqtt
- 🐙 Solar app
- 🐙 Solar embedded

Scan unifier

C++

- ROS package to unify two laser scans into one
- Ripped from cob_navigation and maintained seperatly
- 🐙 scan_unifer

CalloverUSB

PYTHON

- attends and declines call through adb
- Supports both USB and wireless communication
- 🐙 CalloverUSB

Other repos

- 🐙 Linux dotfiles | 🐙 esp wifi handler | 🐙 farmprice-webscrap | 🐙 tyre pressure

Events

Flipkart Grid 3.0 *Finalist*

- Multi agent system with centralised navigation server using camera in grid based task space
- Implemented collsion detection and recovery behaviour
- Omnidirectional agents with no sensor
- ⦿ flipkart-challenge

Smart India Hackathon *Winner*

- Winner in Hardware edition
- ARIS-Accident rescue and investigation system
- realtime update of nearby signs using AJAX
- Ad-hoc based accident message relay system
- Centralised monitoring and proccesing accident cause
- ⦿ ARIS

L & T techgium *semiFinalist*

- Multi agent system with centralised navigation using camera in grid based task space
- Implemented collsion detection and recovery behaviour
- Omnidirectional agents with no sensor

Eyantra *cleared 5 tasks*

- mobile manipulator simulation for autonomous agriculture application
- Implemented collsion detection and recovery behaviour
- Autonomous navigation with lidar and perception with depth cameras

Daksh 2020 *Finalist*

- Smart traffic management using RSSI and HTTP
- Implemented communication with ambulance and traffic lights through HTTP