

SARATH M

Machine Learning Engineer

@ sarathm00@gmail.com
SarathM1

+91 9496354518

Saranya House, North Paravoor P.O, 683513

Kerala, India

EXPERIENCE

Specialist

Tata Elxsi

July 2016 – Ongoing

Technopark, Trivandrum

Embedded System Engineer

Unisync Technologies

Jan 2015 – July 2016

Vyttila, Ernakulam

MOST PROUD OF



My Professional Achievement

Awarded the highest rating "Outstanding" in three consecutive appraisal cycles in Tata Elxsi



My Academic Achievement

Final year academic project "Hexapod" was selected for the finals in State level competition



Martial Arts

Black Belt holder in Shito-Ryu style of Karate

EDUCATION

Course in Embedded Systems

Vector India Institute, Bangalore, Karnataka

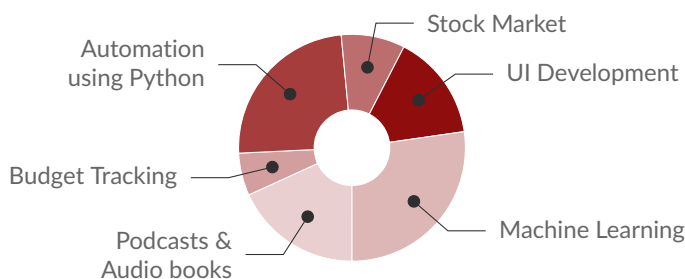
2014

B.Tech (ECE)

Govt. College of Engineering Cherthala, Cochin University Of Science and Technology, Kerala

2010 - 2014

INTERESTS



MY LIFE PHILOSOPHY

"Quality is not an act; it is a habit."

STRENGTHS

Team Player

Passionate Programmer

Fast Learner

Hard-working

Eye for detail

SKILLS

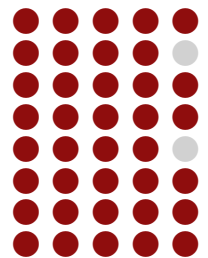
Machine Learning Frameworks

Tensorflow
Scikit-learn
NLTK



Visualisation & Data Processing

Pandas
Numpy
Flask
Bokeh
Plotly
Grafana
Twitter Bootstrap
PyQt/PySide



Continuous Integration & Test Automation

Jenkins
Robot Framework



Devops

Docker
Ansible



LANGUAGES

English
Malayalam
Hindi



PROJECTS

ADAS features for Autonomous Vehicle project

2016-2017

The objective of the project is to develop and L2 Autonomous Car

- Development of Object detection system using Convolutional Neural Networks
 - Faster-RCNN, Yolo V2, Single Shot Detectors
 - Development of Drivable Area using Image Segmentation
 - SegNet, Mask R-CNN
 - Testing and deployment of the ML model in a NVidia Jetson TX1 platform
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Battery Management System

2020 - 2021

- The objective of the project is to create an intelligent Battery Management System for Electric Vehicles
 - Initial prototype for testing SPI communication between BMS master controller and a slave board using Raspberry Pi. Create Machine learning algorithms that predict the age and SOC of the battery cell. Creating a GUI and test-suite for the project
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Lidargen

2018-2019

- The objective of the project was to create a tool that would simulate the actual output from a LIDAR sensor. The tool takes three dimensional CAD objects as input and generates corresponding pointcloud. The User is given the freedom to place and orient the multiple meshes to create a virtual scenario
 - To mathematical model the behavior of Lidar and simulate the same using Ray Casting. Designing a Qt based user interface.
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UAV Based Driver View Enhancement

2017 - 2018

- To develop a proof of concept, using a Drone to enhance the view of the Driver and cover blind spots for a larger area around the vehicle
- Designing a State Machine to control the Drone, Create a web application as a User interface using Python as a back-end