# Ashok Muralidharan

Student - Masters in Advanced Robotics

Budding roboticist who loves to work at the intersection of software and robotics. Interested in Computer Vision and Machine Learning. Have 2+ years of active software development experience.



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ashok93.github.io/



github.com/Ashok93

### **WORK EXPERIENCE**

### **Junior Product Hacker** Report Bee Edusys Pvt. Ltd.

09/2015 - 06/2017

Chennai

Achievements/Tasks

- Full stack development experience with expertise in user interfaces in a dynamic startup environment.
- Involved in complete product development life cycle starting from requirement gathering to post shipping tracking and analytics.
- Agile development experience with Scrum as software development framework.
- LANGUAGES/TECHNOLOGIES: Ruby, Python, Javascript, HTML, CSS, GIT

### Assistant System Engineer - Trainee Tata Consultancy Services (TCS)

02/2015 - 09/2015

Chennai

Achievements/Tasks

- Three months of extensive training in database and business intelligence domain.
- TOOLS: Informatica Powercenter, SQL Developer, SAP BI.

### **EDUCATION**

# M.Eng(Control and Robotics)

### Ecole Centrale de Nantes

09/2017 - Present

Nantes, France

Courses

- Computer Vision
- Advanced Programming
- Artificial Intelligence
- Signal Processing
- Mobile Robotics
- Modelling and Control of Manipulators
- Software Architecture

### Deep Learning deeplearning.ai

01/2018 - Present

Online

COURSES

 Neural Network and Deep Learning

 Convolutional Neural Networks

# BE(Electronics and Instrumentation)

### Velammal Engineering College

08/2010 - 04/2014

Chennai

Info

• First Class with aggregate GPA 8.04/10

### **SKILLS**

C++ Python

OpenCV

Matlab

ROS

Git(VCS)

**Javascript** 

Ruby

Deep Learning

Machine Learning

Reinforcement Learning

## PERSONAL PROJECTS

#### Particle Filter Implementation - CPP

- Implemented a 2D robot class that has its associated basic functionalities
- Implemented a particle filter to find the likelihood of the same after some motion and measurement
- Link: https://github.com/Ashok93/Particle-Filter

#### Lane Detection using OpenCV

- Implemented a simple lane detection(from Udacity) using Python, OpenCV and numpy
- Link: https://github.com/Ashok93/lane-detection

#### Kalman Filter Implementation - CPP

- Basic Kalman filter implementation that uses Eigen Library for Matrix computations
- Link: https://github.com/Ashok93/kalmanfilter

#### German Traffic Signal Classification - Using Keras

- Used Keras as ML framework for implementing Convolutional Neural Network for signal classification
- Link: https://github.com/Ashok93/German-Traffic-Signal-Classification

#### Cart-Pole - Inverted Pendulum(OpenAI)

- Implemented a DQN(Deep Q Network) for solving openAI cart-pole balancing problem
- Also used other techiniques like random search and hill climb approach
- Link: https://github.com/Ashok93/OpenAI-Cartpole

#### Tasks Board

- For the love of project management, implemented a simple kanban style tasks board using ReactJS and Redux
- https://tasks-board.firebaseapp.com/
- https://github.com/Ashok93/Tasks-Board

### **INTERESTS**

Computer Vision

Artificial Intelligence

Machine Learning

Reinforcement Learning