**Bharath Satheesh **

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# Education

University of California, Berkeley  |Carnegie Mellon University

ELECTRICAL ENGINEERING & COMPUTER SCIENCES, 2017**|**ROBOTICS ACADEMY AND EMBEDDED SYSTEMS

GPA: 3.3  |SELECTED AS PART OF TEAM INDIA(ROBOGAMES 2013)

# Relevant Coursework

* *Data Structures and Algorithms*
* *Introduction to Artificial Intelligence*
* *Probability theory and Random processes*
* *Optimization Models and Applications*
* *Introduction to Machine Learning*

# Recent endEAvours in computer science </>

* Managing and designing full scale delivery services product. Selected by Berkeley Citris for the Citris Mobile Application Challenge for 2016.
* Implemented *gesture recognition* with the Spotify API to like or ‘upvote’ music with the aid of *Computer Vision*.
* Created a *smart calendar* that keeps track of important events with simple *Machine Learning* techniques like single layered neural networks.
* Built a *smart fan* that directs wind flow based on user location.
* Research: K - nearest neighbor approach to solve simple problems like preferred elementary school for a certain neighborhood with *machine learning****.***
* Research: Application of control theory to solve *power systems* problems, especially on the transmission grid.

# Professional Experience

## Hybrid Systems lab: *University of California, Berkeley*

## UNDERGRADUATE RESEARCH APPRENTICE, MARCH 2015 – PRESENT

* Implemented new functionality for quadrotors to learn its environment based off of simple state and position estimations with unsupervised learning.
* Redesigned a new working code base to control existing hybrid systems for quadrotors and added cross-platform functionality to the existing system.
* Presented solutions from the work at the UTM NASA conference in 2015 on new theory developed in the lab over the course of the internship.

## Model Predictive Controls lab: *University of California, Berkeley*

## UNDERGRADUATE RESEARCH APPRENTICE, AUG 2014 – NOVEMBER 2014

* Engaged in the field of Model predictive control as well as Artificial Intelligence applied to robotics, through work with self driving cars and extensive simulations.
* Design and understand the importance of filters in controls and its application in error estimations and corrections for vehicles.
* Created a new model of control with Kalman filtering where actual highway measurements are recorded by a real time camera system to mimic and approximate closely to the theoretical estimates of the predicted model.