## Ruthvik Peddawandla

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**Education** Bachelor of Science – Computer Engineering and Computer Science

GPA: Major – 3.10 | Fall 2014 – 3.70 [Deans List]

University of Southern California

Class of 2016

Languages/Technologies

C/C++ | Python | HTML/CSS | Raspberry Pi

Advanced Coursework Computer Networks, Robotics, Statistics & Probability, Power Systems, Data

Structures, Algorithms

**Projects** 

Raspberry Pi Personal Voice Assistant

July 2014

- Implemented a voice-controlled personal assistant that interprets requests using wit.ai API.
- Delegates search queries to WolframAlpha and allows the user to control Spotify playback by acting as a local Spotify server.

Android WebApp Development

January 2014

- Conceived a startup concept as a part of a two-man team with a vision of transforming the international courier service by creating a network of crowd sourced couriers.
- Coded the front end of an accompanying web app using HTML, CSS and jQuery.
- Idea/concept app placed 3<sup>rd</sup> and won a cash prize of INR 20,000 in an app innovation competition contested by 500+ teams backed by Intel and the Govt. of Karnataka, India.

**USC** 

**Computer Networks** [Spring 2015]: Coded a 3-Server/2-Client network model in C++ that simulated a distributed hash table. Clients communicate with a server using UDP sockets to retrieve a value stored somewhere in the network. Server-Server communication was enabled by TCP sockets.

**Data Structures** [Spring 2015]: Coded a virtual retail system using C++ and developed a GUI using the Qt libraries. The program features user data encryption using hash functions, product recommendations based on similarity vectors (calculated using Dijkstra's) and an exhaustive search algorithm that leveraged Splay Trees for efficiency purposes.

**Sports Analytics** [Spring 2015]: Developed a leveraged goals model and wrote a program to scrape and statistically analyze European Champions League data to determine the value of individual goals

## Experience

Intern - Emmvee Solar Systems Pvt. Ltd.

July-August 2014

- Performed site evaluation analysis, drafted wiring diagrams, calculated and selected various components for systems based on consumer-specific constraints and requirements.
- Coordinated and worked with a team of 5 other interns to complete projects assigned by the manager utilizing different solar power industry technical software.

Intern - Hydromax Ltd.

June 2012 | June-July 2013

- Worked with on-site crew to operate electrical powerhouse at a hydroelectric power plant.
- Shadowed project manager and contributed to problem management committee.

## Leadership

Project Africa

January 2012 - May 2014

Communicated with Ugandan organization and coordinated team's service trip to identify
the biggest problems affecting a remote village in central Uganda and actively engage the
locals in discussions and activities to implement solutions to overcome them.