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## **EDUCATION**

### **CUPERTINO HIGH SCHOOL**

June 2017 | Cupertino, CA

### **USC**

Expected June 2021 | Los Angeles, CA

# HONORS & AWARDS

### **GOOGLE FOOBAR**

Completed Recruitment Challenge

#### **HP CODE WARS**

1st Place

#### **MAKE HACKS**

Social Network Award

#### **ANGELHACK**

Myo & Autodesk Award

# SKILLS

### **PROGRAMMING**

Languages:

Python • Java • Octave/Matlab

Javascript • C++ • Shell • HTML/CSS

Libraries & Frameworks

OpenCV • Numpy • Pandas • Scikit

Tensorflow ullet NodeJS ullet Angular ullet Firebase

Tools

Unity • Maya • Photoshop • Illustrator

# **PROJECTS**

#### **AR-DRONE**

An autonomous indoor drone navigation program using the Parrot AR Drone. Uses computer vision algorithms to navigate its surroundings.

### **SCRIBE**

HackingEDU

An optical character recognition program for helping students study from their textbooks. Using Google Tesseract and word2vec to convert pictures from a textbook page into practice quiz questions.

### **BUTLER**

Los Altos Hacks

An intelligent slackbot for managing teams and projects. Butler uses natural language processing to parse intents and manage github and slack organizations.

### **EXPERIENCE**

### **FALKONRY** | DATA SCIENCE INTERN

Sept 2017 - Present | Sunnyvale, CA

- Isolated early warning patterns in EEG data of epilepsy patients
- Developed "kestrel" to automate core algorithm testing.
- Created preanalyzer to determine an optimal subset of signals to be used in training.

### **DRONESDASH** | CTO & Co-Founder

July 2016 - Aug 2017 | Menlo Park, CA

- Developed computer vision and machine learning solutions in order to authenticate users during delivery
- Leading core product development to develop coordinated drone network and client-side app

### **TECHLAB EDUCATION | SOFTWARE ENGINEERING INTERN**

May 2015 - Aug 2015 | Saratoga, CA

- Led various programming classes teaching teens and children how to code(Web Development, IOT, Python)
- Collaborated with other interns to redesign the Techlab website and work on an aquaponics system.

### **CHS ROBOTICS** | SOFTWARE CAPTAIN

Oct 2013 - June 2015 | Cupertino, CA

- Managed team 7128's software team which included motivating and mentoring freshman and sophomore teammates.
- Oversaw autonomous and drive code and maximized team efficiency within a constrained time period.

## RESEARCH

#### **DEXTO** | ELECTROMYOGRAPHY RESEARCH

July 2015 - Dec 2015 | Cupertino, CA

Developed a prosthetic modeling and positioning software. Implemented naive bayesian classification algorithm and low pass filters + constant pass standard deviation formula to interpret real time electromyographic signals into gesture events.

#### **ISTITCH** | Computer Vision + Diabetes Research

June 2015 - August 2015 | Saratoga, CA

Worked with Yash Vaishnav, an M.D. Candidate to develop a image processing program to classify patients with diabetes from videos of their corneal sub-basal nerve plexus. Used OpenCV image stitching tools and vector trees of the detected nerves to calculate fiber tortuosity, branch density, etc. for classification.

# PATENTS

BINARY FLASH AUTHENTICATION | Patent No. 15246258