# **Andrew Chen**

Saratoga, CA | (408) 621-7168 | aandrewc@ucla.edu

#### **Objective**

An opportunity to gain valuable hands-on experience in a summer internship in industry.

#### Education

Bachelor of Science Electrical Engineering, June 2019 University of California Los Angeles

#### Projects

#### Wearable Shoulder Motion Tracker (E96)

Used an Intel Edison Compute Module with 9 Degrees of Freedom Sensor to measure shoulder rotational position. Attached buzzer provides feedback on correct pushup form.

#### Automated Color-detecting Garage Door (EE3)

Rotating cardboard garage door opens if object detected and its color is green (opens fast) or blue (opens slowly). Powered by NI myDaq and programmed in Labview.

#### IR Distance Sensor (UCLA IEEE: OPS)

Distance sensor with a blue indicator LEDs that lights brighter as an object. An IR LED shines and a detector receives reflected IR light to measure position. Logic controlled by a Teensy board.

#### Rodent (OPS)

Simplified Micromouse with PID control to follow a path laid out by a maze of walls. Programmed on a Teensy paired with two IR distance sensors and two motors connected to an H bridge.

#### Micromouse (UCLA IEEE)

Building a Micromouse for competitions in the spring. Involves selecting parts, assembling the mouse, and programming it. Currently assembling a generic Rat as practice for the actual car.

#### Experience

#### Summer Research (REU) at UCLA

Worked in Professor Christina Fragouli's lab on a variation of pliable index coding, where messages are sent and coded in a way to satisfy client requests. Applications in satellite broadcasts and wireless networks

#### Physics 1AH (Mechanics) Tutor

Weekly one hour sessions for a group of 5-10 Fast Track students enrolled in Physics 1A Honors

#### Skills

Soldering, Programming (Xcode, Matlab, Labview, Arduino), PCB design (Eagle); Microsoft Word, Excel, and PowerPoint; QGIS (map design and analysis)

### **Clubs and Honors**

UCLA IEEE OPS (Open Project Space) member Micromouse member Tau Beta Pi, candidate HKN (EE Honor Society), candidate 2015-2016 Fall 2016-present Fall 2016-present Fall 2016-present

0 0010

Oct-Dec 2015

Status: Sophomore

Enrolled in EE Fast Track Program

GPA: **3.917** 

#### April-June 2016

## February 2016

#### April-June 2016 walls Programm

Sept 2016-present

Summer 2016

Fall 2016-present