ROBERT URSUA





SUMMARY

Junior level Electrical Engineering student looking for a Software/Electrical Engineering internship position. Experienced in robotics/automation, circuit design, and development of software tools.

EDUCATION

UNIVERSITY OF CALIFORNIA - LOS ANGELES

B.S. Electrical Engineering 2018 GPA: 3.90/4.00

CITY COLLEGE OF SAN FRANCISCO

Engineering Transfer 2016 GPA: 4.00/4.00

RELEVANT COURSEWORK

- Object Oriented Programming (C++)
- Data Structures & Algorithms (C++)
- Signals & Systems (MATLAB)
- Circuit Analysis
- Engineering Electromagnetics
- Logic Design of Digital Systems
- Probability and Statistics in EE (MATLAB)

SKILLS / TECHNOLOGIES

EXPERIENCED: C/C++, Arduino, ARM mbed

USED BEFORE: Javascript, EAGLE, Visual Studio, Linux/Windows Environment, Python, MATLAB, Multisim, HTML, CSS

PROJECTS

MICROMOUSE ROBOT (Coded in C++, ARM mbed, Designed in EAGLE)

Sep 2016 - Mar 2017

- As a team, built and programmed a robot that navigates through the fastest route in a maze
- Implemented software for PID controller systems and maze solving/navigation algorithms
- Designed & optimized schematics & PCB layout with carefully researched parts
- Fastest robot in internal club competition

BRUIN NAV (Coded in C++)

Mar 2017

- Created a turn-by-turn navigation system that presents optimal routes for trips within Los Angeles
- Implemented path-finding algorithms and optimal data structures for quick query processing
- Among the top 5% out of 400 students

BRUINWALK BROWSER EXTENSION (Coded in Javascript, CSS, HTML)

Dec 2016

- Created a Google Chrome extension that adds professor ratings and final grade distributions to class listings in UCLA registration pages
- 2700+ weekly users and rated 5.0/5.0 stars in Chrome Store Page

SMART BARBELL COLLAR - IDEAHACKS 2017 (Coded in C++, HTML, CSS)

Jan 2017

- As a team, built an MSP430 based prototype for a barbell attachment that communicates with a weightlifter's smart phone to help them maintain proper form during workouts.
- Top 9 finalist

MUSIC VISUALIZER (Coded in C, Designed in EAGLE)

Nov 2016

 Designed and built an Arduino controlled device that performs spectrum analysis on an input audio and displays the results on an LED matrix

LEADERSHIP / ACTIVITIES

SENATOR

Sep 2015 - Apr 2016

Associated Student Council, CCSF- Ocean

- Managed public relations campaign that increased student council election voter turnout by 1000%
- Communicated student body issues to administrators and to other students