

Jose Luis Santiago

310-593-3780 | Los Angeles, CA 90016 | jlsanti.dnr@gmail.com | www.linkedin.com/in/j-santi | [Portfolio](#)

EDUCATION

University of California, Santa Cruz	September 2016-June 2021
Bachelor of Science in Computer Engineering; Concentration: Robotics & Control	GPA: 3.05
Honors: UCSC: Dean's Honor Roll - Spring 2017, Winter 2021	

SKILLS

-
- **Programming:** Embedded C Programming, C++ Programming, Java Programming, MATLAB, Verilog, RISC-V Assembly Programming, CAD, Python, HTML, CSS, JavaScript
 - **Languages:** English, Spanish (Read/Write/Speak)

PROJECTS

Bio-Inspired Locomotion: Penguin Aquaflying Wings	January 2021-March 2021
<i>Independent Researcher</i>	

- Researched penguin swimming kinematics to model the wing flapping motion in MATLAB
- Simulated penguin wing motion with wings of different sizes (0.8-1.8 times the size of a Gentoo Penguin Wing) to understand the correlation between wing size, lift, and drag forces
- Concluded that wing size (0.8-1.8 times the size of a Gentoo wing) is positively correlated with Lift. At larger sizes, the wing succumbs to mass and is unable to prove useful for locomotion

IoT Wildfire Alarm System	January 2021-June 2021
<i>Design Member</i>	

- Collaborated in a 6-person team to designed an IoT Wildfire Alarm System
- Built a prototype that uses sensors integrated with a WiFi and 5G enabled microcontroller
- Analyzed parameters indicative of wildfire risk. These parameters included: CO2 levels (0-5000ppm), humidity (20-80%RH), and temperature (0-50°C)
- Led documentation of project during weekly meetings to keep team up to date on progress

EXPERIENCE

Jack Baskin School of Engineering, UC Santa Cruz	September 2018-September 2021
<i>Peer Adviser</i>	

- Advised over 1,000 students in their respective engineering majors by developing class schedules, providing coaching and support with coursework, and assisting students with selecting major and career pathways
- Managed and tracked confidential student data and records of student population of over 4,000 to determine student's progress and eligibility for graduation
- Acted as first point of contact and communication for over 4,000 students at the advising office
- Participated in meetings with the Peer Advisor Program Coordinator and/or other Undergraduate Student Affairs staff at least 3 times an academic year, including customer service training

MESA Engineering Program (MEP), UC Santa Cruz	September 2017-June 2021
<i>Member</i>	

- Advised and mentored underrepresented students in engineering using skills and knowledge gained as a peer adviser
- Cultivated relationships and built community to grow with underrepresented engineering students