Montserrat Santillan-Rodriguez

Orlando, FL | (229) 205–7539 | msantillanrodriguez75@knights.ucf.edu

EDUCATION

University of Central Florida   **Fall 2019 – Spring 2024 (expected)**

Bachelor of Science in Electrical Engineering
Major GPA: 3.839

Relevant Coursework

Digital Systems	Linear Circuits 1 and 2
Engineering Computation and Analysis	Concepts of Computer Science
Differential Equations	Statistics for Engineers
Fundamentals of Electrical Power Systems	Computer Organization

SKILLS

Programming Languages

Python	JavaScript
C / C++	HTML
Arduino	CSS
Verilog	

Software

Vivado	XCTU (for radio / wireless communication)
Eagle	Noraxon (for EMG and IMU sensors)
Fusion 360	Adobe Suite (including Illustrator and Photoshop)
Arduino	

Other

Soldering
Technical writing
Digital design

EXPERIENCE

Wearable Engineering and Assistive Robotics   **Fall 2020 - Present**

- PCB design training with EAGLE
- Arduino coding, implementation, and circuit testing
- Shadow and assist masters and PhD students in their research
- Soldering and unsoldering training and practice

Rowing Mechanics and Multimodal Feedback Research   **Fall 2021 - Present**

- Assisted in writing and editing specific aims, methodology, and procedure files for research study
- Designed and assembled circuits with force sensitive resistors and vibro-motors to measure grip force
- Worked with Noraxon software, EMGs, and IMUs to collect reference data for study
- Tested and created connections for Arduino real-time data transfer through WiFi with XBees and XCTU software

ACTIVITIES

Institute of Electrical and Electronics Engineers   **Fall 2020 - Present**

Service Committee

Wind Turbine STEM/Community Outreach: Designed a wooden wind turbine project modeled on Fusion360 that included a house with a light emitting diode, wiring, and a DC motor that powered the light when blown on; brought to approximately 70 students in Title I schools

HONORS AND AWARDS

- Dean's List, all semesters
- CECS ODI Scholar
- IEEE Member of the Month, October 2021