JOSEPH A HODSON

(727) 459-9622 www.joeyhodson.com Joeyhodson josephahodson@gmail.com

EDUCATION

University of Central Florida, Orlando, FL **GPA: 3.86/4.00** **August 2018 to December 2022**
Bachelor of Science in Electrical Engineering, Minor in Computer Science

- **Honors -** Bright Futures Florida Academic Scholar (100% tuition coverage), President's Honor Roll (Fall 2019, Spring 2020), College of Engineering Dean's List (Fall 2018, Spring 2019)
- **Coursework -** Embedded Systems, Signals & Analysis, Electronics I, Circuits II, Digital Systems, Computer Organization, Semiconductor Devices, Computer Science I, Intro to C, Physics III

EXPERIENCE

Lockheed Martin Space, Cape Canaveral, FL **May 2020 to August 2020**
Electrical Engineer Intern

- Mined 32 years of Trident II testing data to feed a machine learning model that predicts the most probable solution(s) to a test fault.
- Used Tableau to theorize and depict biases within my dataset in order to provide my team with advanced data analytics.
- Cross referenced Naval Acceptance Test Requirements to hardware failure reports in order to derive the root causes of out-of-specification hardware failures.

I-CON Systems, Oviedo, FL **January 2020 to March 2020**
Electrical Engineer Intern

- Helped conduct numerous, unique tests on active infrared sensors that are implemented throughout I-CON's major commercial product line.
- Used EAGLE to redesign existing PCBs.

IEEE (UCF Chapter), Orlando, FL **January 2019 to Present**
General Body Member

- Networked with other engineering students and faculty.
- Attended club workshops, worked with Texas Instruments' MSP430 to further my understanding of deeper MCU applications.

PROJECTS

Self-Sufficient Fish Tank, Orlando, FL **August 2020**

- Designed a small embedded system to control and simplify a fish tank's operations.
- An Arduino Nano based system that controlled peripherals including RGB LEDs, an air pump, a water pump, and an automatic fish feeder.

Personal Website, Clearwater, FL **December 2020 to January 2021**

- Developed a personal web server in which is hosted on a Raspberry Pi on my local network. The pi utilizes Flask, a Python web framework.
- Front-end was written in HTML/CSS to render multiple pages, documenting past projects and personal hobbies. Domain name is set to forward to No-IP domain to accommodate router's dynamic IP.

Robotic Quadruped, Clearwater, FL **May 2019 to August 2019**

- Created an autonomous walking spider with four, 3-part moving limbs.
- Built using an Arduino Nano and twelve SG90 servo motors. Self-programmed spider using Arduino's IDE.

TECHNICAL SKILLS AND INTERESTS

Hardware	MCUs, FPGAs, Microsoldering, Sensors, Raspberry Pis, Motors, PCB/Circuit Design
Software	C (adept), Data Structures, MIPS Assembly (novice), Verilog (novice), HTML/CSS (novice), Python (novice)
Programs	Multisim, WSL (Ubuntu), Tableau, Vivado, EAGLE, Excel, MARS
Interests	3D Printing, Spearfishing, DIY Electronics Projects, Traveling