JOSEPH HODSON

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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 - Circuits II, Digital Systems, Computer Organization, Computer Science I, Introduction 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.

Electric Skateboard, Clearwater, FL **April 2019 to June 2019**

- Modded an existing penny skateboard into a remote controlled electric skateboard using LiPo batteries and a relay circuit.

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), C++ (novice), Verilog (novice)
Programs	Multisim, WSL (Ubuntu), Tableau, Vivado, EAGLE, Excel, MARS
Interests	3D Printing, Spearfishing, DIY Electronics Projects, Traveling