

# Tristan Phillips

(813)-743-2186 | tkphillips@crimson.ua.edu | tristankphillips.com

## EDUCATION

---

### The University of Alabama, Tuscaloosa, AL

B.S. in Computer Engineering, Dec 2020

B.S. in Physics, Dec 2020

Cumulative GPA: 3.00/4.00

## RESEARCH EXPERIENCE

---

### The University of Alabama, Tuscaloosa, AL

January 2019 – May 2019

Advanced Antenna and Microwave Laboratory

Undergraduate Research Assistant

- Helped design and evaluate millimeter wave antennas
- Worked on optimizing the design of IFA antennas

### UA Senior Design Project, Tuscaloosa, AL

August 2019 – May 2020

Alabama Space Grant Consortium Cube-Sat Development

Communication and Data Handling [C&DH] Team

- Worked with the Alabama Space Grant consortium on a state-wide CubeSat project
- Supported the continual development of radiation tolerant small form-factor computer to be used on a CubeSat launching on Artemis II

## WORK EXPERIENCE

---

### R2C Aerospace, Huntsville, AL

January 2021 – Present

Electrical Engineer

- Worked with a team of engineers to support DoD contracts, with my main responsibilities being PCB design, obsolescence avoidance, and functional testing
- Created and revised technical drawings to adhere to the ASME Y14.100 standard
- Wrote scripts to support and automate multiple office tasks
- Designed and constructed development boards in-house for quick-turn prototyping

### NASA Marshal Spaceflight Center, Huntsville, AL

Summer 2018 & 2019

Hardware Development Intern

- Worked with MSFC's EM31 to help develop two pieces of prototype space flight hardware indented for operation on the ISS.
- Collaborated with four other engineers to research and develop the prototypes, with my main responsibilities being I/O, power systems, software development and embedded system design.
- Flight unit has been approved for launch and is scheduled for a technology demo aboard the ISS.

## AWARDS & ACTIVITIES

---

- Boy Scouts of America Troop 665 [Eagle Rank]
- University of Alabama Million Dollar Band [Trombone]
- Alabama Astrobotics [Electrical Team]

## CERTIFICATIONS

---

- IPC J-STD-001
- OSHA 10
- Altium Designer Essentials

## ADDITIONAL SKILLS

---

- Soldering, MATLAB, Python, CNC Routing, Altium PCB Designer, AutoCAD, Arduino, C, C++, Assembly Code, Prototype PCB development, Circuit Design, Digital Systems Design, Microcontroller Programming, Team Management, and Experience integrating electrical and mechanical systems, VHDL.