

## EDUCATION

Georgia Institute of Technology  
Atlanta, GA | May 2023

B.S. Computer Engineering  
Honors Program

GPA: 3.35

Rewriting the Code Fellow 21

## SKILLS

### Software / Tools:

Altium  
KiCad  
Git  
Microsoft Visual Studio Code

### Skills:

Soldering  
Circuit Design

### Programming Languages:

C++  
C  
Java  
Python  
VHDL  
IDL  
Qt  
HTML  
CSS  
Javascript

### Relevant Coursework:

Digital Design Lab  
Computer Organization and Programming  
Data Structures and Algorithms  
Object Oriented Programming  
Linear Algebra  
Intro. Signal Processing

### Organizations:

Yellow Jacket Space Program  
PAXC @ NASA - Exec Board  
WoAA National  
Journey Church of Atlanta  
SGAC

### Languages:

Vietnamese (Proficient)  
Korean (Beginner)

### Interests:

Space Guitar  
Working Out Reading

## EXPERIENCE

### NASA Goddard Space Flight Center

Greenbelt, MD | Virtual

#### Electrical Ground Support Equipment Pathways Intern

August 2020 – January 2021

- Created a proposal for an EGSE board to test the Roman Space Telescope's (RST) deployment system; developed high-level technical requirements and procedures for testing
- Proposed changes to original schematic design using Altium, integrating PCB with magneto-resistive current sensors, optimizing to remove overall noise from the system
- Converted IDL scripts to Python using the FITS file package for the Science Data Systems Branch to filter out astronomical image defects for the RST

### Yellow Jacket Space Program

Atlanta, GA

#### Software Lead - Avionics Team - Propulsion Electronics

April 2019 – Present

- Leading software development and design logic for engine controller used for testing and flight using C++ and teensy; assisting data acquisition software development using load cell sensor
- Developing a PCB for a field reader to test sensor functionality on the testing field using Altium
- Developed a light, encompassing schematic using KiCad for the engine controller to turn engine valves on or off for testing purposes, interfacing with a control room and teensy

#### Systems Team

January 2019 – August 2019

- Developed YJSP engineering specifications; integrating and testing different projects by each team using models and simulations; returning necessary feedback
- Interpreted software for a 6DOF simulation, documenting usage using LaTeX

### Lockheed Martin

Huntsville, Alabama | Virtual

#### UX/UI Intern

May 2020 – August 2020

- Supported development teams with run-ahead user experience designs in a SaFE Agile environment to improve a missile simulation web application
- Communicated with the customer, product owners, development teams, and architects to ensure designs accurately convey information architecture to the user
- Solved design issues by optimizing the efficiency of the design to showcase large quantities of information to the users

### The Aerospace Corporation

El Segundo, CA

#### Software Engineering Intern

May 2019 – August 2019

- Contributed to the user-interface of a cutting-edge proprietary satellite visualization engine using C++, OpenGL, and the Qt-based framework by adding features to make development and customer usage effortless and more efficient

## LEADERSHIP & RESEARCH

### Space Systems Design Lab – Glenn Lightsey Research Group at Georgia Tech

#### Undergraduate Researcher

Atlanta, GA

#### GT-2 SmallSat – Avionics

January 2021 – Present

- Developing the avionics system for GT-2, a cubesat, putting together avionics systems requirements and researching different options for a new deployment system
- Designing the ground support equipment PCB and box for ground testing

#### Mission Operations

August 2019 – December 2019

- Developed an application to receive and display current GT satellite data using HTML, CSS, Javascript, and MongoDB

#### Sensor Testing Rig and Operation Systems Project

January 2019 – May 2019

#### Command and Data Handling Team, Attitude, Determination, and Controls Team

- Worked with electronics such as the GPS, magnetometer, and IMU to find flight position; created sensor wires and cables for testing and flight

### NASA L'SPACE Mission Concept Academy

Virtual

#### Deputy Project Manager & Web Lead

May 2020 – July 2020

- Managed a interdisciplinary team working with NASA engineers to learn mission proposal procedures to develop & propose a mission concept to Mars, completing a PDR within 12 weeks