

EDUCATION

Georgia Institute of Technology
Atlanta, GA | May 2022

B.S. Computer Science
Honors Program

Concentration:
Devices & Systems Architecture

GPA: 3.35

Rewriting the Code Fellow 20-21

SKILLS

Programming Languages:

C++
C
Java
Python
VHDL
HTML
CSS
Javascript
Qt

Software / Tools:

Git
Altium
KiCad
Microsoft Visio
Microsoft Visual Studio
Microsoft Visual Studio Code

Relevant Coursework:

Digital Design Lab
Computer Organization and Programming
Data Structures and Algorithms
Object Oriented Programming
Linear Algebra

Campus Organizations:

Yellow Jacket Space Program
Journey Church of Atlanta
Students for the Exploration and Development of Space

Interests:

Space
Working Out / Running
Guitar
Reading
Meeting new people

WORK EXPERIENCE

NASA Goddard Space Flight Center

Greenbelt, MD – Virtual

Incoming Software Engineering Pathways Intern

August 2020

- Supports the Avionics and Electrical Systems branch, Code 565 with the Electrical Ground Support Equipment group

Lockheed Martin

Huntsville, Alabama – Virtual

UI/UX Intern

May 2020 – Present

- Supports development teams with run-ahead user experience designs, to improve an old missile simulation application by developing a new simulation for replacement
- Communicates with the customer, product owners, development teams, and architects to ensure designs accurately convey information architecture to the user
- Develops detailed wireframes using Microsoft Visio to prototype and present to the users; receives and provides feedback from and to UX team

The Aerospace Corporation

El Segundo, CA

Software Engineering & Visualization 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
- Optimized efficiency of usage for the web interface of a satellite intercept and rendezvous visualization tool by developing the web interface using Javascript, HTML, and CSS creating a smoother user experience

ORGANIZATIONS / RESEARCH / PROJECTS

Yellow Jacket Space Program

Atlanta, GA

Avionics Team – Propulsion Electronics

April 2019 – Present

- Create and design circuit schematics and developing printed circuit boards using KiCad for propulsion electronics and avionic sensors for a rocket to space
- Developing a schematic for a field reader to test sensor functionality on the testing field using Altium
- Developed a light, encompassing schematic 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

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 a mission concept, completing a PDR within 12-weeks

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

Undergraduate Researcher

Atlanta, GA

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
- Prepared circuit boards for flight through soldering and placement of components