

EDUCATION

Georgia Institute of Technology
Atlanta, GA | Dec 2022

B.S. Computer Science
Honors Program

Concentration:
Devices & Systems Architecture

GPA: 3.35

Rewriting the Code Fellow 20-21

SKILLS

Programming Languages:

C++ IDL

C

Java

Python

VHDL

HTML

CSS

Javascript

Qt

Other Skills:

Soldering

Circuit Design

Software / Tools:

Git

Altium

KiCad

Microsoft Visio

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

Languages:

Vietnamese (Proficient)

Korean (Beginner)

Interests:

Space Guitar

Working Out Reading

EXPERIENCE

NASA Goddard Space Flight Center

Software & Electrical Engineering Pathways Intern

Greenbelt, MD | Virtual

August 2020 – Present

- Works with the Avionics & Electrical Ground Support Equipment group, converting IDL scripts to Python to filter out astronomical image defects for the Roman Space Telescope

Yellow Jacket Space Program

Lead Programmer – Propulsion Electronics – Avionics Team

Atlanta, GA

April 2019 – Present

- Create and design circuit schematics and developing printed circuit boards using KiCad/Altium for propulsion electronics and avionic sensors for a rocket to space
- Developing a PCB for a field reader to test sensor functionality on the testing field using Altium
- Leading software development and design logic to turn engine valves on/off for testing and flight using C++ and Teensy
- 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

Lockheed Martin

UX/UI Intern

Huntsville, Alabama | Virtual

May 2020 – August 2020

- Assisted development teams with run-ahead user experience designs in a SaFE Agile environment to improve a missile simulation
- 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

Software Engineering & Visualization Intern

El Segundo, CA

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

LEADERSHIP & RESEARCH

NASA L'SPACE Professional Development Programs

NASA Proposal and Writing Evaluation Experience

Virtual

September 2020 – Present

- Works on a student team to learn how to write and propose a technological idea by writing, reviewing, and scoring proposals through the lens of a NASA reviewer

Mission Concept Academy

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 to Mars; a PDR was completed 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; soldered and placed components on PCBs