

EDUCATION

Georgia Institute of Technology
Atlanta, GA | May 2023

B.S. Computer Engineering
Honors Program

GPA: 3.42

Rewriting the Code Fellow 20-21

SKILLS

Software / Tools:

LabVIEW	Eagle
Altium	VS Code
KiCad	MS Access
Git	

Skills:

Harnessing
Soldering
Circuit Design

Programming Languages:

C++	CSS
C	Javascript
Java	HTML
Python	MIPS
VHDL	R
IDL	MySQL
Qt	

Relevant Coursework:

Digital Design Lab
Comp. Organization and Prgmrng
Data Structures and Algorithms
Object Oriented Programming
Linear Algebra
Intro to Signal Processing
Circuit Analysis
Prgmrng HW & SW Systems

Organizations:

Yellow Jacket Space Program
PAXC @ NASA - Exec Board
WoAA National
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

Electrical Ground Support Equipment Pathways Intern

Greenbelt, MD | Virtual

May 2021 – August 2021

- Developed harnessing for an EGSE rack to deploy circuits for the Roman Space Telescope's (RST) deployment system and measure resistance across hinge pots and circuits
- Used LabVIEW to develop software to create functionality for the rack – integrated with NI's PXI chassis, ensuring precise and accurate measurements and logging information
- Ensured all documents for wire harnesses included correct technical specifications and developed software tools for database sorting in Microsoft Access for PACE using MySQL

Software & EGSE Pathways Intern

August 2020 – January 2021

- 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
- Created a proposal for an EGSE board to test RST's deployment system; developing high-level and technical requirements and procedures for testing
- Integrated board with an FPGA using Altium for PCB design; optimizing for quiet current feedback using magneto-resistive current sensors

Yellow Jacket Space Program

Software Lead - Avionics Team - Propulsion Electronics

Atlanta, GA

April 2019 – December 2020

- Led 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
- 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

Lockheed Martin

UX/UI Intern

Huntsville, Alabama | Virtual

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

The Aerospace Corporation

Software Engineering Intern

El Segundo, CA

May 2019 – August 2019

- Contributed to a cutting-edge proprietary satellite visualization engine using C++, OpenGL, and Qt 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

LEADERSHIP & RESEARCH

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

Undergraduate Researcher

Atlanta, GA

GT-2

January 2021 – Present

- Developing acceptance test procedures for cubesat -Z plate and main board for future testing purposes—soldering components onto board and transitioning to leadership position for Spring
- Created harness and developed stress test & logging software using Python to test the Orion Omega2s+ for performance optimization and temperature in a TVAC chamber
- Developed & routed a flatsat PCB using Eagle to connect 7, 52-pin cubesat panels in a one-to-one configuration for testing & debugging
- Prototyped and tested new method for solar panel deployment using nitinol wire

NASA L'SPACE Mission Concept Academy

Deputy Project Manager & Web Lead

Virtual

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