

Bowen Groff

bowengroff@gmail.com | linkedin.com/in/bowengroff

EDUCATION

University of Central Florida

B.S. in Computer Engineering, GPA 3.54/4.00

Expected May 2027

Orlando, FL

EXPERIENCE

Embedded Software Engineer Intern

L3Harris Technologies

May 2025 – October 2025

Palm Bay, FL

- Developed a **Linux kernel driver** in **C** that captured fibre channel frames from an **FPGA** and transmitted them on a **UDP port**, enabling message receive and transmit on a chassis designed for aircraft communication systems.
- Mapped reserved memory blocks in **custom device tree** with **C++** userspace application, allowing low-latency message handling between the FPGA and kernel.
- Verified message authenticity** using Anonymous Subscriber Messaging protocol, which accepted **27** unique message labels.

Software Engineer Intern

L3Harris Technologies

May 2024 – April 2025

Colorado Springs, CO

- Upgraded a command line to a webpage for deep space telescope operators at GEODSS* sites using **ReactJS** and **SpringBoot**.
- Streamlined location and conversion of .FITS files using **reusable components** in **React** through selection of date, time, and telescope.
- Continuously made additions to the webpage through feedback from operators, such as a **message logger** utility, **.ini editing** utility through the webpage, and **launching external programs**.

Software Engineer Intern

L3Harris Technologies

May 2023 – August 2023

Palm Bay, FL

- Engineered a **predictive analysis tool** trained on a dataset of <5000 data points to **predict failure modes** in failing **F-35** chipset modules
- Trained one of three **AI models** used to obtain final output with a focus on word frequency to failure mode, which predicted failures correctly ~**68%** of the time.
- Created and executed a **presentation** of PAT to F-35 hardware module operators and **stakeholders** on the F-35 contract, with ROI estimated at **\$5,000,000** due to failure mode diagnosis achieved ~**99.5%** faster and **thousands** of hours saved overall.

PROJECTS

Pirateships

Knight Hacks VII Hackathon

October 2024 - November 2024

University of Central Florida

- Collaborated with a team of three to create a Battleships inspired game with working multiplayer using **Google Cloud**.
- Built using **Python** with **PyGame** to create a grid, allow for ship placement, and update each user's game per turn.

EXTRACURRICULARS

Event Planning Team Member

oSTEM

August 2024 – Present

University of Central Florida

Kickstart Mentee

Knight Hacks

August 2025 – Present

University of Central Florida

SKILLS

Software/OS: Atlassian Suite, Jenkins, Oracle VirtualBox, Linux (RedHat, Ubuntu), Microsoft Office

Programming Languages and Frameworks: C, C++, Java, Python, JavaScript, React

Certifications: MTA: Introduction to Programming Using Python (Retired June 2022)

*Ground-Based Electro-Optical Deep Space Surveillance