

Spencer Robieson

spencerrobieson@gmail.com — 847-732-4507

Westminster, CO

Active Top Secret Clearance

Education

University of Illinois at Urbana-Champaign

Bachelor of Science in Electrical Engineering with Honors

Minor in Computer Science

GPA: 3.55/4.0

Aug 2019 – May 2023

Experience

Northrop Grumman - Space Systems - Boulder, CO

Associate Cyber Systems Engineer

Aug 2023 – Present

Aug 2024 – Present

- Mission software tester for SBIRS
- Utilize Linux command line for testing and troubleshooting system issues
- Write Python and Bash scripts to assist in system testing and analysis
- Update test procedures to test new functionality in upcoming system update
- Run test procedures to identify system deficiencies and work with developers to resolve issues

Associate Electrical Engineer

Aug 2023 – Aug 2024

- Hardware engineer on S2E2
- Identified, diagnosed, and repaired issues with RF, fiber optics, and server hardware
- Secondary hardware site lead for system testing and operations
- Co-lead for updating engineering drawings and documentation
- Coordinated calibration and inventory of test equipment and tools with external vendor
- Trained new team members on system maintenance, troubleshooting, and hardware processes
- Lead team of six to inventory, pack, and relocate program equipment to customer location

University of Illinois at Urbana-Champaign

Undergraduate Teaching Assistant

Aug 2022 – May 2023

Jan 2023 – May 2023

- Teaching assistant for ECE 330 - Power Circuits and Electromechanics
- Coordinated grading and course logistics with a team of course staff
- Held office hours to assist students with homework and course concepts

Undergraduate Grader

Aug 2022 – Dec 2023

- Homework grader for ECE 464 - Power Electronics
- Quickly handled grading, rubric questions and requests for regrading

Northrop Grumman - Space Systems - Boulder, CO

Hardware Intern

Jun 2022 – Aug 2022

- Returning intern on S2E2 hardware team
- Acquired more hands-on experience with shelters and antennas
- Assisted with depopulation of two shelters to prepare for hardware upgrades
- Worked in team to assemble engineering estimate for spare antenna hardware

Hardware intern

May 2021 – Jul 2021

- Intern on S2E2 hardware team outfitting SBIRS mobile ground terminals
- Gained an understanding of fiber-optic cable and its application in the system
- Reviewed and updated engineering drawings for major fiber-optic upgrade in terminals
- Installed servers, RF equipment, and appropriate wiring inside terminals

Skills

Programming Languages: Python, C, C++, Bash

Libraries: NumPy, SciPy, SymPy, Matplotlib, CVXPY

Operating Systems: Windows, Linux (Debian, Ubuntu, Alpine)

Software: Command Line, Git, Docker, Podman, LTspice, Microsoft Office, L^AT_EX

Hardware: Oscilloscope, function generator, spectrum analyzer, multimeter, optical power meter and source, soldering

Relevant Coursework

Data Structures

Power Electronics

Power Systems Analysis

Digital Systems Lab

Digital Signal Processing

Electric Machinery

Computer Systems and Programming

Analog Signal Processing

Power Circuits and Electromechanics