Steven Broaddus

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EDUCATION

The Ohio State University, Columbus, OH

Bachelor of Science in Computer Science and Engineering

Honors Program in the College of Engineering

Expected Graduation: May 2025

GPA (4.00 scale): 3.94

QUALIFICATIONS & SKILLS

Relevant Experience:

- Coursework of programming applications with Python, C++, Java, and MATLAB
- Thorough experience using Python for data processing, machine learning, REST API development, GUI development using Qt, and networking research
- Extensive hands-on experience working with electrical components and hardware
- Completed Cisco's Networking Academy's CCNAv7 Networking Course

Programming Languages: Python, C/C++, Java, JavaScript, MATLAB, Assembly, Ruby, SQL

Markup Languages: HTML, CSS, and Sass

Software/Services: Docker, GitHub Actions, SolidWorks, PostgreSQL, Simulia CST Suite

EXPERIENCE

Undergraduate Researcher at The Ohio State University (May 2024 – Current)

Description: Researching the development and integration of ML into a new class of wearable coils that capture joint kinematics (flexion/rotation) without impeding natural movement. Work is alongside the Wearable and Implantable Tech. Research Group at OSU

AFRL Scholars Program Intern, Kirtland Air Force Base (September – April 2024)

Title: Associated Attack Surfaces and Vulnerabilities of Space Vehicle Autonomous Functions *Description:* Surveyed cyber-attacks against terrestrial systems with autonomous capabilities to determine probable vulnerabilities for space systems with similar capabilities

AFRL Scholars Program Intern, Kirtland Air Force Base (May – August 2023)

Title: Trusted Platform Module for Embedded Systems

Description: Investigated the application of a trusted platform module (TPM) for hardening an embedded computing system. Developed software to interface with the TPM module

SOFTWARE DEVELOPMENT PROJECTS

Personal Website (October – November 2022)

- Made from scratch using pure HTML, CSS, and JavaScript with Bootstrap5

Fundamentals of Engineering Honors Robot Project (January – April 2022)

- Programmed and documented a robot in C++ using Ohio State's Proteus microcontroller to maneuver through a course performing different tasks