

Liam Murphy

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Objective: Dedicated and academically accomplished Computer Science student with a strong focus on cybersecurity, seeking a challenging summer internship in 2024. Aiming to apply my technical expertise, leadership skills, and passion for ethical hacking and network defense to contribute to innovative cybersecurity solutions in a dynamic and collaborative environment.

WORK EXPERIENCE

New Vision Development Group

Pittsford, NY

Dates Employed: 05/2023 to 08/2023, 40 hours per week

Chief Technology Officer

Led innovation using emerging technology, significantly reducing operational costs and minimizing staffing requirements. Supported the development and realization of expansive, all-inclusive manufactured home communities for diverse demographic groups. Developed a practical break-even calculator in Python to assess the timeline for achieving cost-recovery in housing projects. Leveraged artificial intelligence tools to enhance digital marketing strategies and bolster sales outreach initiatives.

Greenlight Networks

Rochester, NY

Dates Employed: 05/2022 to 08/2022, 40 hours per week

Field Tech Intern

Contributed to Greenlight's presence in Rochester by adding new points of contact to their network and assisting with installations. Assisted in the provisioning of Optical Network Terminals as well as the construction of Greenlight's fiber-optic network. Communicated with Greenlight customers to promote customer satisfaction.

AeroSafe Global

Rochester, NY

Dates Employed: 06/2021 to 08/2021, 40 hours per week

Engineering Intern

Assisted in the production and testing of vacuum-insulated packages for Pfizer, Merck, and NASA. Performed sublimation testing, incoming quality inspections, and qualified new tests to help prevent excursions. Created new organizational procedures to improve efficiency for the Procurement and Engineering departments.

EDUCATION

Binghamton University, State University of New York, Thomas J. Watson College of Engineering and Applied Science

4+1 (BS/MS accelerated) program.

Master of Science in Computer Science - Expected May 2025

Bachelor of Science in Computer Science - Expected May 2024

Awards: Dean's List (Fall 2020, Fall 2022, Spring 2023, Fall 2023), SFS CyberCorps Scholarship Recipient

INDEPENDENT PROJECTS

C++ Programmer

Independent Project | Binghamton, NY

December 2023

- Built a multi-threaded C++ web server incorporating a proxy server as an intermediary for handling real-time HTTP requests.
- Implemented TCP sockets in C++ with a proxy server layer for efficient real-time HTTP request parsing and response handling.

Python Programmer

Independent Project | Binghamton, NY

November 2023

- Implemented a secure ATM-bank server interface using SSL for symmetric key exchange and encrypted transaction processing.
- Engineered real-world ATM server operations with SSL encryption, ensuring secure and reliable financial transactions.

C Programmer

Independent Project | Binghamton, NY

March 2022 - April 2022

- Used Bit Manipulation to convert IEEE doubles to varying-size floating-point numbers based on input.
- Successfully converted IEEE doubles to arbitrarily sized IEEE floating point numbers based on input. Managed with the GitHub Version Control System.

C/x86 Programmer

Independent Project | Binghamton, NY

February 2022 - March 2022

- Performed a simulated buffer overflow attack on a C program to change the data entered into an array without detection.
- Programmed a script in x86 that would overflow the buffer of a target function, change the data, and then return to the next function.

JOB-RELATED TRAINING COURSES

Complete Ethical Hacking Bootcamp 2023: Zero to Mastery

JOB-RELATED SKILLS

Languages: C/C++, Python, Java, x86 Assembly, Bash, HTML, CSS, JavaScript

Software and OS: Git, Linux, Windows, Metasploit, Nmap, Ghidra

JOB-RELATED HONORS, AWARDS, MEMBERSHIPS, ETC.

Binghamton University Men's Swimming and Diving Team - Division 1 Athlete

- 2023 SUNY Chancellor's Scholar-Athlete of the Year for Men's Swimming and Diving.
- 2022-23 America East Men's Swimming & Diving All-Academic Team.

Capture The Flag Club - Member

Binghamton University Student-Athlete Advisory Committee - Member