# Malcolm Ferguson

50 Laurel Drive, Berlin, CT 06037

860-357-1591 82ferguson82@gmail.com https://github.com/BigFergie82/Projects

### EDUCATION

# University of Connecticut

Storrs, CT

Bachelor of Arts in Computer Science

August 2023 - May 2027

Concentration in Cybersecurity and Minor in Economics GPA 3.3

# PROJECTS

### Password Manager

Python, Cryptography, JSON

Developed a command-line password manager with symmetric encryption, key management, search functionality, and JSON-based storage.

### Password Strength Checker

Python, Cryptography

Developed a Python-based password analyzer that calculates entropy, estimates crack time, and provides feedback on character composition to improve password security.

### TCP Client-Server Word Search

Python, Networking

Implemented a TCP client-server application enabling clients to submit queries and perform wildcard word searches on server-hosted text files, supporting real-time text retrieval and pattern matching.

# RELEVANT CLASSES

Data Structures and Object-Oriented Design in Python, Introduction to Discrete Systems and Algorithms, Systems Programming, Cybersecurity Lab, JavaScript Introduction Course, Functional Programming Fundamentals, Introduction to Computer Architecture, Computer Networks and Data Communication

### WORK EXPERIENCE

# Economic Risk Lab Research Assistant

2025

Helped aid in research of old economic policies from the 19th century

## A1 Home Improvement Sales Intern

2025

Worked with the sales team and gained hands-on experience in customer outreach and lead generation

# Lowe's Garden Associate

2024

Supported the garden center and handled duties relating to maintaining the health of plants

### Whole Foods E-commerce Associate

2023

Managed several tasks including distributing online orders and ensuring efficient metrics were upheld

### Extracurriculars

### The Ability Experience

Assisted in fundraising efforts to promote disability awareness

Volunteered to support individuals with special needs through service events

Organized events that foster inclusion and accessibility

### UConn Club Ultimate Frisbee A

Captain, Vice President

Developed teamwork, communication, and leadership skills on and off the field

### HuskyTHON

Helped raise funds for Connecticut Children's Hospital through campus events

Coordinated with a team to engage donors and organize fundraising initiatives

### Pi Kappa Phi

Engaged in leadership development and community service initiatives

Participated in brotherhood events fostering teamwork and camaraderie