

## Education

**University of Illinois at Chicago, Chicago, IL.**  
B.S. & M.S. in Computer Science  
4.0 grade point average

Honors College student  
Member of the A.C.M.

Aug. 2019  
to  
May 2023

## Relevant Coursework

Data Structures (CS 251)  
Software Design (CS 342)  
Computer Algorithms (CS 401)

Formal Logic (MATH 430)  
Differential Equations (MATH 220)  
Linear Algebra (MATH 320)

## Skills

Various Linux command line utilities  
Wireless networking analysis  
Regular expressions  
GNU Make, Valgrind, and GDB  
Computer maintenance and repair

### Programming Languages

Exploring Haskell and Coq  
Experienced with C & C++  
Proficient in Bash, Python & [ElX](#)  
Familiar with JavaScript, Java, AHK, & Rockstar

## Experience

### Telephone Studies Intern, CACI

Explored the effectiveness of honeypots as a method of collecting information with a focus on SSH attacks  
Analyzed binaries, network traffic, and other attacker activities to garner insights into individual attackers and trends

May 2022  
to  
Aug. 2022

### Telephone Studies Intern, CACI

Designed and developed a hypervisor-side anti-malware solution for guests utilizing virtual machine introspection  
Worked extensively with the Linux kernel to identify and test attack vectors

May 2021  
to  
Aug. 2021

### CS 251 (Data Structures) Teaching Assistant, University of Illinois at Chicago

Engaged with students during self-run office hours, lab sections and as an oral exam proctor  
Provided iterative feedback on project design and requirements

Aug. 2020  
to  
May 2021

### Intern, University of Illinois at Chicago MakerSpace

Independently designed and manufactured a desk-mounted microphone boom arm using MakerSpace facilities  
Designed and manufactured sneeze guards for use in UIC offices

July 2020  
to  
Aug. 2020

### Network Operations Intern, Naperville Community Unit School District 203

Led a small team to conduct a suite of wireless surveys across the district  
Condensed findings into building level reports highlighting problems and providing solutions

June 2019  
to  
Aug. 2019

### Golf Caddie, Naperville Country Club

Carries patrons clubs for duration of the golf round  
Engages directly with golfers to ensure an enjoyable and timely round

Apr. 2018  
to  
Aug. 2020

## Projects

### Current Projects

Developing [HaskTTP](#), a conditionally compliant HTTP/1.1 webserver written in Haskell from the socket level  
Using Iris as a component of a VST specification for verifying C programs in Coq

### Prior Projects

Writing a fully automated Twitch-specific IRC bot, [BariBot](#), in C++ from the socket level  
Explored elliptic curve arithmetic in Python over various fields  
Creating generative art through Java applications via the Processing3 library

## Additional Activities

Searching for the perfect macaroni and cheese recipe  
Amateur pianist

Amateur poet looking to eventually publish