

## 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  
GNUMake, Valgrind, and GDB  
Computer maintenance and repair

### Programming Languages

Exploring Haskell and Coq  
Experienced with C & C++  
Proficient in Bash, Python & [L<sup>A</sup>T<sub>E</sub>X](#)  
Familiar with JavaScript, Java, AHK, & Rockstar

## Experience

### Telephone Studies Intern, CACI

Explored the effectiveness of honeypots as method of collecting information on internet 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 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 self chosen project 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  
Present

## 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