

## Education

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**Lexington, KY** **University of Kentucky** **Aug 2016 – May 2020**

- **Major:** Computer Science (3.8 GPA, Dean's List, Lewis Honors College)
- **Minor:** Mathematics
- **Certificates:** University of Kentucky Cybersecurity Certificate (In progress)
- **Notable Coursework:** Systems Programming, Networking, Computer Organization, Databases, Cryptology, Matrix Algebra, Algorithm Design and Analysis

## Experience

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**Software Developer, Intern** **Carlson Software** **May - Aug 2018**

- C++03 development on a CAD software suite, particularly designed for Civil Engineering.
- Worked in a group of four other interns to develop new cross-platform compatibility features in the Civil Engineering suite
- Worked on a machine learning project with LIDAR data for feature recognition

**Research Assistant** **University of Kentucky** **May - Aug 2019**

- Worked with a computer engineering professor to collect data for a research project on removing camera shake from images
- Assisted with reading calibration and analysis

**Lab Assistant** **University of Kentucky** **Aug 2019 - Present**

- Assisted students with labs and projects for the university's intro. to object oriented programming (C++) class
- Graded projects and exams throughout the semester

## Software Projects

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**Systems Programming**

- Implemented socket programming in C++ for a terminal-based network tic-tac-toe game
- Created a terminal-based Tetris implementation in C using the ncurses library for a 24-hour hackathon.

**Cryptology**

- Created a probable-prime generator in python to produce very large (300+ digit) primes for use in RSA
- Developed an RSA encryption/decryption program in python

## Skills

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### Languages:

- Proficient: C, C++, Python
- Familiar: Java, C#, JavaScript, SQL

### Environments / Tools:

- Proficient: Linux (bash), Git, GNU Make, gdb, Visual Studio Code
- Familiar: Windows, Visual Studio, matplotlib

### Concepts:

- Proficient: Algorithm design/complexity analysis, data structures, cryptology, systems programming
- Familiar: Networking, compiler design, database modeling