

## Education:

Cornell University, College of Engineering  
Cumulative GPA: 3.45

Bachelors of Computer Science, Expected 2020  
Business Minor, Presidential Research Scholar

## Experience:

**Subteam Lead on Autonomous Bicycle Team** 2017

- Currently creating the world's first self-steering, self-balancing bicycle.
- Currently Computer Vision lead, working towards obstacle detection using OpenCV.
- Former member on the Navigation team coordinating the start-up of all the bike systems

**Cornell University Teaching Assistant** 2017

- Selected to be a TA for CS 2112 (Honors Object-Oriented Design & Data Structures)
- Led weekly discussions, designed student projects, and held weekly office hours

**Cornell University Research Assistant** 2016-17

- Used R for exploratory analysis on available student data
- Identified key differences between taking co-requisite courses as pre-requisites
- Visualized and presented findings to a faculty panel for future improvements

**UCF Office of Research & Commercialization Quality Assurance Intern** 2016

- Worked on a team using the Agile methodology to connect entrepreneurs with investors
- Certified application stability in a production environment through unit testing

## Projects:

**Simulating Evolving Artificial Life** 2016

- Implemented a compiler for a given context-free grammar using Java
- Created a GUI to control and visualize a multi-threaded world using JavaFX
- Built a Java-backed thread-safe web server to handle distributed worlds

**Text Editor** 2016

- Implemented a text editor that had word completion, spell check, and text search functionality
- Created a trie for text search and autocomplete, built a bloom filter and hashmap for spell check

**Encryption** 2016

- Implemented the RSA algorithm and several other ciphers, using the Factory Design Pattern
- Used input/output streams to manage memory usage when encrypting and decrypting large files

**Recommendations** 2017

- Created a website that gives users restaurant recommendations based off a Yelp database
- Created a NodeJS server and hosted the corresponding website on Heroku

**SNAP Helper** 2017

- Created an android app that would be a supplement to the SNAP food assistance program
- Implemented payment by NFC chip and a grocery planner

## Skills:

Java • Unit Testing • Git • R • HTML • CSS • JavaScript • C++ • Python • L<sup>A</sup>T<sub>E</sub>X

## Applicable Courses:

Computer Graphics • Analysis of Algorithms • Object-Oriented Design & Data Structures Honors  
• Embedded Systems • Digital Logic & Computer Organization • Networks • Discrete Structures • Data Science • Linear Algebra • Multivariable Calculus • Probability Models and Inference