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OLIVIA XIANG

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Education:

Cornell University, College of Engineering
Cumulative GPA: 3.42

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

Experience:

Capital One Software Developer Intern 2017

- Summer 2017

Autonomous Bicycle Team 2017

- Currently creating the world's first self-steering, self-balancing bicycle.
- Software 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 • LaTeX

Applicable Courses:

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