

RACHEL NASH

(704) 775-6182 ♦ rsn55@cornell.edu ♦ <https://rsn55.github.io>

EDUCATION

Cornell University, College of Arts and Sciences ♦ Ithaca, NY

Aug. 2016 - Expected May 2020

- Candidate for B.A. in Computer Science, Minor in Linguistics, **GPA: 3.77**
- Advanced Coursework: Operating Systems, Functional Programming, Computer Systems Organization and Programming, Computer Graphics, Computer Networks, Algorithms, Artificial Intelligence, Discrete Structures
- Dean's List: Fall 2016, Spring 2017, Fall 2017

WORK EXPERIENCE

Ab Initio Software ♦ Lexington, MA

Jun. 2019 – Aug. 2019

Software Engineering Intern

- Extended a tool that translates data files into a record format structure to work for JSON files. Programmed the entire stack, building server-side functionality in C++ and Java and the UI in Typescript/React. Code will be shipped into production for customer and internal use this coming fall.
- Designed the user interface as well as the APIs available in the back-end. Wrote extensive unit tests for each of the C++, Java, and Typescript layers. Identified commonalities among tree-based file formats and proposed a common framework for implementation which can be used to add support for similar data file types.

Cornell Computer Science Department ♦ Ithaca, NY

Jan. 2018 – May 2019

Teaching Assistant

- Taught recitation section of 40 students for Functional Programming. Received TA Award from Professor Foster.
- Held office hours and graded assignments for Computer Systems Organization and Operating Systems courses.

Cisco Systems ♦ Research Triangle Park, NC

Jun. 2018 - Aug. 2018

Software Engineering Intern

- Implemented the front end features for an internal project management Flask app created from scratch with a team of two other interns. Purpose was to cut costs (\$50,000 annually) by reducing Salesforce use. The site allows managers to track resources, visualize their team's time utilization, and easily assign tasks. Used JavaScript.
- Created a cross-platform web service for file encryption and tagging using WebSockets in Java.

SELECTED PROJECTS

Cornell Music Department ♦ Ithaca, NY

Jan. 2019 - Present

Front-end Developer

- Developed a website which uses the Music21j library to provide real-time feedback for students learning the basics of piano. Designed a dynamic programming algorithm to analyze user input.

Queue Me In ♦ Ithaca, NY ♦ <https://github.com/cornell-dti/office-hours>

Aug. 2018 - Dec. 2018

Front-end Developer

- Implemented features of a web app that aims to improve office hours with an online queue system. Created graphic data visualizations for use by instructors in making administrative decisions using React and Typescript.

Research Connect ♦ Ithaca, NY ♦ <https://github.com/cornell-dti/research-connect>

Oct. 2017 - Aug. 2018

Front-end Developer

- Collaborated with a team of 7 to develop an undergraduate research application site from scratch. Used React to create features including filter and search pages, matching students to positions, and dynamic profile editing.

ACTIVITIES

Phi Sigma Pi National Honor Fraternity: Senior Committee Chair

Sep. 2018 - Present

Cornell Design and Tech Initiative: Front-end developer (<https://www.cornelldti.org>)

Oct. 2017 - Dec. 2018

Cornell Concert Commission: Volunteer for concert production and promotion

Aug. 2017 - Present

Girls Who Code: Volunteer programming instructor for high school students

Sep. 2017 - Dec. 2017

SKILLS

Programming Languages and Libraries: Python, OCaml, Java, React, C, C++, JavaScript, TypeScript

Natural Languages: English (native), Italian (intermediate)