

# RACHEL NASH

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704.775.6182

## EDUCATION

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**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: 3.79**
- Relevant Coursework: Operating Systems, Functional Programming, Computer Systems Organization, Graphics, Networks, Algorithms, Artificial Intelligence, Discrete Structures, Object-Oriented Programming, Databases
- Dean's List: Fall 2016, Spring 2017, Fall 2017

## WORK EXPERIENCE

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**Ab Initio Software** ♦ *Lexington, MA* *Jun. 2019 – Aug. 2019*

Software Engineering Intern, SDK Team

- Extended a tool for identifying the metadata format that best describes sample data so that it can be used by Ab Initio's data processing software. Added support for JSON and Hadoop file formats.
- Built the full stack from server-side functionality in C++, to APIs in Java, and a user interface in Typescript and React with MobX. Wrote unit tests for every layer of the stack and collaborated with UX team to design the UI.
- Identified commonalities among tree-based file formats and proposed a common framework for implementation.

**Cornell Computer Science Department** ♦ *Ithaca, NY* *Jan. 2018 – May 2019*

Teaching Assistant

- *Data Structures & Functional Programming (Jan. 2019 – May 2019)*: Planned and taught lessons reviewing course material twice a week with class of 40 students. Received TA Award from Professor Nate Foster.
- *Computer Systems Organization (Jan. 2018 – May 2018)* and *Operating Systems (Aug. 2019 – Dec. 2018)*: Assisted students with programming projects during weekly office hours and graded assignments.

**Cisco Systems** ♦ *Research Triangle Park, NC* *Jun. 2018 - Aug. 2018*

Software Engineering Intern, Data Security Team

- Implemented the front-end for an internal project management web app created from scratch with a team of two other interns. Purpose was to cut costs (est. \$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

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**Cornell Music Department** ♦ *Ithaca, NY* *Jan. 2019 - Present*

Frontend Developer

- Developing 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.

**Cornell Design & Tech Initiative** ♦ *Ithaca, NY* *Oct. 2017 - Dec. 2018*

Frontend Developer

- **Queue Me In**: Contributed to 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**: Collaborated with an Agile team of designers and developers to create an undergraduate research application site from scratch using React.

## ACTIVITIES & INTERESTS

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**Campus Activities**: Senior Committee Chair of Phi Sigma Pi National Honor Fraternity, Front-end developer for Cornell Design & Tech Initiative, Volunteer for Cornell Concert Commission, Volunteer for Girls Who Code

**Interests**: Frontend & full-stack web development, linguistics, Italian language, Rubik's cubes, painting

## SKILLS

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**Programming Languages**: Java, JavaScript, OCaml, Python, HTML, CSS, SQL, C, C++

**Libraries and Frameworks**: React, TypeScript, MobX