

# Samantha Liu

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## EDUCATION

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### Cornell University

Bachelor of Arts, Computer Science

Cumulative GPA: 3.902

Relevant Courses: Intro to Computing Using Python, Object-Oriented Programming and Data Structures, Discrete Structures

Ithaca, NY

May 2022

## WORK EXPERIENCE

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### Cornell Computing and Information Science

Consultant, Intro to Computing Using Python

Ithaca, NY

Aug. 2019 – Present

- Holds office hours and helps run lab sections for an introductory programming course with over 800 students.
- Assists professor in grading exams, assignments, and labs so that students receive constructive feedback in a timely manner.
- Works with a team of teaching assistants and consultants to ensure course runs smoothly.

## PROJECTS

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### Cavern of Gold, Java

November 2019

- Implemented a locally optimized traversal algorithm to find the treasure inside of a maze using relative distances to the target.
- Developed an algorithm to maximize the amount of gold collected using optimal gold-to-distance ratios and a shortest-path algorithm.

### Space Invaders, Python

May 2019

- Used stateful controllers to manage a complex, interactive application based on the game Space Invaders.
- Incorporated programming animation, collisions, and sound to enhance user experience.

### K-Means Clustering on Spotify Playlists, Python

April 2019

- Implemented a complex and powerful data analysis algorithm to cluster Spotify songs based on characteristics such as tempo, style, key, volume, time signature, etc.
- Created organized playlists by utilizing data encapsulation on real data from existing personal Spotify playlists.

## LEADERSHIP & COMMUNITY INVOLVEMENT

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### Asian American Intersarsity, Cornell University

Large Group Coordinator

Ithaca, NY

November 2019 – Present

- Organizes weekly meetings that discuss applicable and appropriate topics based on current needs and interests of the fellowship.
- Coordinates with members of executive team and regional staff to plan meetings by clearly communicating expectations and ideas.

### Intercollegiate Summer English Camps

English Teacher

Beijing, China

July 2019 – Aug. 2019

- Participated in cultural exchange by teaching English classes at various English language and summer camps.
- Worked with students of all ages to improve listening, speaking, and reading skills in preparation for high school and middle school entrance exams.
- Collaborated with administration to promote a rigorous and vibrant learning environment that generated enough interest to change a one-time event into an annual enrichment program.

## SKILLS

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Python, Java, HTML, CSS, Microsoft Office, Mandarin