**Samantha Zhang**

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**OBJECTIVE**

Computer Science major with keen interests in delivering great user experiences with software development and design. Looking to be part of a team to develop impactful solutions.

**EDUCATION**

**Cornell University**,College of Engineering, Ithaca, NY **Expected May 2023**

Bachelor of Science, Computer Science • GPA: 3.96 • Dean’s List for all semesters

***Relevant Courses:*** Object-Oriented Programming and Data Structures, Discrete Structures, Data Structures and Functional Programming, Computing Using Python, Intro to iOS Development, Intro to Digital Product Design

**ACADEMIC PROJECTS**

[**Challenge With Friends**](https://github.com/sazhang02/AppDevHackChallenge), Introduction to iOS Development **Spring 2021**

* Won best overall app in Hack Challenge, semesterly hackathon for students enrolled in Cornell AppDev courses, against 70+ Cornell students
* Designed and built an iOS app using Figma and Swift
* Implemented entire iOS frontend featuring tab-based navigation system, user login portal, data filtering, and encoding/decoding images
* Integration with backend team members’ custom API deployed on Heroku using Alamofire & CocoaPods

[**Stuck In the Desert**](https://github.com/sazhang02/CS-3110-Final-Project), Data Structures and Functional Programming **Spring 2021**

* Collaborated with team members to create a fully functional RPG top-down puzzle exploration level-based game using OCaml
* Implemented main game logic and GUI with OCaml Graphics library and camlimages

[**Instagram Case Study**](https://medium.com/@sjz46/instagram-concept-an-alternative-to-scrolling-past-posts-7445f592b6c), Intro to Digital Product Design **Spring 2020**

* Designed and prototyped a custom navigation and categorization of feeds to improve Instagram user experience (UI/UX)

**EXTRACURRICULAR ACTIVITIES**

**Software Team**, Cornell Nexus **March 2021 - Present**

* Working with fellow students to make an autonomous robot that will collect microplastic from beaches and oceans
* Designed GUI on Figma and implementing GUI for controlling our robot using Python libraries such as PySimpleGUI and Matplotlib
* Developing real-time display for robot data, status, geolocation, and traversal history as well as interactive features such as autonomous/manual control and a command-line

**Girls Who Code Volunteer**, Women In Computing at Cornell (WICC) **February 2021 - May 2021**

* Guided high schoolers weekly through exercises in Python designed to help them learn fundamental programming concepts and mentored student on guessing game project created from scratch

**RELEVANT EXPERIENCE \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Neural Networks for Meta-Emotions,** *National Science Foundation REU Undergraduate Research* Assistant **June 2021 - Present**

* 1 of 10 out of 292 students selected to participate in Georgia State University’s Research Experience for Undergraduates in Immersive Media Computing
* Created 3D polygon meshes of actors’ faces from stills using FaceBuilder add-on for Blender
* Humanizing NPCs by using data derived from acting footage to train a Recurrent Neural Network for determining and animating lifelike NPC facial expressions for Neural Networks for Meta-Emotions research project

**AI Bot Gaming Platform**, *Full-Stack Intern* **December 2020 – February 2021**

* Implemented a multiplayer online game of Dots and Boxes in a Python web server deployed in a docker container in AWS
* Setup a new lambda deployment pipeline to AWS in a docker container for automatically updating games

**Mobileware Inc.**,*Design Intern* **May 2020 – August 2020**

* Designed logos, custom icons, promotional images, and mockups to improve usability for commuter schedule app and finance tracking website using Sketch and Figma

[**HackOurCampus**](https://www.figma.com/proto/YSXPWkmC3BhqieXJ3bdVMZ/ChewQueue?page-id=11%3A40&node-id=135%3A2286&scaling=min-zoom), *Designer*  **August 2020**

* Collaborated with three other Cornell students to create an online ordering system hack addressing de-densifying overcrowded on-campus dining locations in a hackathon

**SKILLS**

* **Programming Languages:** Python, Java, OCaml, Swift
* **Applications/Tools:** Github, VSCode, Atom, Eclipse, Figma, Sketch, iMovie, & Unreal Engine