# Max Zhou

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## **Experience**

1Cademy - Python Development Research Intern

Feb 2021 - Jun 2021

- Conducted research on a large-scale platform with the 1Cademy Python community.
- Averaged over 25 educational nodes per month, ranging from beginner to advanced Python language topics.
- Worked on open-source full stack Python projects with the community.

## **Education**

Rutgers University May 2023

BS, Computer Science, Cognitive Science

New Brunswick, NJ

**Select Courses**: Systems Programming, Computer Architecture, Data Structures & Algorithms, Object-Oriented Programming, Discrete Structures, Linear Algebra

## **Projects**

https://www.github.com/maxjzhou

#### Virtual Escape Room

- Rendering 3D objects using C#/Unity.
- Creating virtual 3D rooms to allow for user interaction with puzzles.
- Animating visual object movements through a GUI given user keyboard and mouse commands.

#### **Cache Simulator**

- Implemented L1 and L2 caches using C.
- Simulated data flow between cache and memory using read/write commands.
- Support for different cache/block sizes, associativity (direct mapping, fully associative, n-way associative), and cache policies (FIFO, LRU).

## Network/Friendship Graph

- Implemented various data structure (e.g., Linked Lists, Adjacency List Graphs, Hash Tables) in Java to represent a network of friends and friends of friends.
- Implemented various graph algorithms such as shortest path identification, cluster detection, connecting vertices detection, and Depth First Search / Breadth First Search.

## **Skills**

**Java**, **Python**, **C**, C# / Unity, HTML/CSS + JavaScript, Git, Unix, Windows OS, Linux OS, Leadership, Communication, Customer Service, Creativity