# Lucy Zhu

CS Student @ Stanford website: <a href="mailto:lzhu21.github.io">lzhu21.github.io</a>

#### **Education**

#### Stanford University 2017-21

BS in Computer Science GPA: 3.664

#### **Skills**

**CS**: Python, Java, C++, HTML/CSS, Javascript, ReactJS, NodeJS, MongoDB

**Design**: Figma, Unity, Unreal, 3DS Max, Adobe Photoshop, Premiere Pro, Indesign

### **Relevant Courses**

- Data Management and Data Systems
- Object-Oriented Systems Design
- Cross-Platform Mobile Development
- Web Applications
- Design and Analysis of Algorithms
- Human-Computer Interaction Design
- Game Design
- Computer Organization and Systems
- Interactive Computer Graphics

#### **Activities**

#### Stanford STEAM –

Intersection of Art & Technology Sept 2019 – current

- **Stanford XR** VR/AR Sept 2019 – current
- Financial Officer Intern Girls Teaching Girls to Code Sept 2017

# **Work Experience**

#### Software Development Intern - Sigmaways (Summer 2020)

 developed the backend for a Vyze web application used to develop and manage their demo pages using a combination of ReactJS, HTML/CSS, and DynamoDB on AWS

#### Software Developer - Stanford University (Summer 2020)

- contributed towards the development of web applications using Django, HTML/CSS, and Vue.js
- implemented a search system for software installed in machines

#### Research Intern - Stanford Vision/AI Department (Summer 2019)

- worked under Prof. Leonidas J Guibas to research about application of deep learning towards analyzing 3D models
- designed and implemented a pioneering CNN in Python to count semantic part types and parts of 3D point cloud models
- demonstrated the feasibility of solving the counting problem given the appropriate part labels with a peak accuracy of 95.7%

# Programmer - Virtual Human Interaction Lab (Sept 2018 - June 2019)

- led the logic and workflow for integrating videos into 1000 Cuts, a simulation about the effects of racial discrimination
- cooperated in a team to implement the cross-platform structure of 1000 Cuts from Unity to Unreal
- wrote C++ and C# scripts to implement interactivity within simulations including avatar movement and object manipulation

#### Image Developer - Stanford University (June 2018 - Dec 2018)

- wrote Python scripts ranging from bash aliases to running multiple processes that sped up workflow towards deploying the OS image
- responsibilities included delivering the project in a fast-paced environment while working with remote machines and a ticketing system to fulfill numerous daily computer issues

# Freelance Artist/Illustrator (2013 - present)

- set a timetable of art commissions arranged on Tumblr and Twitter
- exercised effective communication to achieve customer satisfaction

### **Projects**

# Chicago Taxi DB - Data Management & Systems Project

- analyzed the Chicago taxi database via BigQuery (Google Cloud) and writing Python (matplotlib), and SQL scripts on Colaboratory
- trained a machine learning model on predicting optimal factors to maximize profits

## Villainous Contraptions - game design project

- try the game out or read about the process!
- programmed the inventory interaction and the visual hint system in C# on Unity
- designed and drew the character sprites for dialogue interactions with Aesprite

# **Computer Graphics and Imaging** – 3 projects for Computer Graphics courses

- first project made it into top 10 images of class and got my raytraced image displayed on the class website: <u>CS148 2018 Showcase</u>
- used OpenGL, pbrt, raytracing, C++ in Visual Studio to create computer-generated images