

# Lucy Zhu

CS Student @ Stanford  
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## Education

**Stanford University 2017-21**  
BS in Computer Science  
GPA: 3.712

## Skills

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

**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

## Projects

**Chicago Taxi DB** – Data Management & Systems Project

- analyzed the Chicago taxi database via BigQuery (Google Cloud) and wrote Python (matplotlib), and SQL on Google 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

- made it into top 10 images of class and so had my project displayed on the class website: [CS148 2018 Showcase](#)
- utilized OpenGL, pbrt, raytracing, C++ in Visual Studio to create computer-generated images

## Work Experience

**Program Designer – St. Louis County PD (July 2021-present)**

- utilized Java, Javascript, HTML/CSS, JSF, JSP, and SQL to prototype, develop, and augment web applications

**Fullstack Engineer – Sylphi, Inc. (June 2021-present)**

- app development using Swift/SwiftUI front-end with Firebase Cloud back-end

**Software Development Intern – Sigmaways (Summer 2020)**

- prototyped 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)**

- development on web applications using Django, HTML/CSS, and Vue.js ranging from implementing search system for software installed in machines to augmenting a custom digital Kanban board web app for staff quality of life improvements

**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

**Digital Artist/Illustrator (2013 – present)**

- maintain a storefront for selling art merchandise - [HAIKU](#)
- organized and self-published an artbook