# Lucy Zhu

With a focus on artificial intelligence and computer graphics, I am interested in the intersection of technology and design such as XR with my skills consisting of writing software and designing graphics. I have working experience with virtual reality and deep neural networks.

## Contact

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## **Education**

## Stanford University 2017-21

BS in Computer Science GPA: 3.688

#### Relevant Coursework:

- CS148 Computer Graphics and Imaging
- CS248 Interactive Computer Graphics
- CS348 Computer Graphics: Image Synthesis Techniques
- CS103 Mathematical Foundations of Computing
- CS109 Probability for Computer Scientists
- CS106B Programming Abstractions
- CS107 Computer Organization and Systems

### Skills

**CS**: Python, Java, C++, C **Design**: Unity, Unreal, Unreal, Maya, 3DS Max, Adobe Photoshop, Premiere Pro, Indesign

# **Public Service**

# Media Team – Students for a Sustainable Stanford (Sept 2018 – June 2019)

- promoted events hosted by organization via social media
- maintained the website

## Financial Officer Intern – Girls Teaching Girls to Code (Sept 2017 – June 2018)

- contacted tech companies for sponsorship
- mentored in coding workshops hosted to encourage interest in STEM fields in high school girls

## Public Relations Co-Chair – Stanford Vietnamese Student Association (Sept 2017 – June 2019)

- maintained the website, notifications of upcoming events
- designed flyers, Facebook covers, and merchandise

# **Work Experience**

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

- worked under Prof. Leonidas J Guibas to research about application of deep learning towards analyzing 3D models
- wrote and trained a neural network in Python to answer questions about 3D point cloud models

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

- cooperated in a team of 3 students to work on 1000 Cuts, a virtual reality simulation about racial discrimination
- utilized Unity, Vizard, and Unreal engines to create the needed functionality for simulations
- wrote C++ and C# scripts to implement interactivity within simulations including avatar movement and object manipulation

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

- maintained both Mac and Windows OS on machines throughout the campus
- wrote Python scripts to ensure functionality of software
- created bash scripts to generate and push mass image updates as well as shortcuts to speed up workflow

## Freelance Artist/Illustrator (2013 - present)

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

## Illustrator - Pediatric Orthopedic Project, Inc. (Aug 2016 - Apr 2017)

- collaborated with a nonprofit organization providing free orthopedic surgeries for impoverished children global-wide
- designed illustrations for a children's book "Ten Bears" for Dr. Mady Stazzone, president of the Pediatric Orthopedic Project to promote and fund the foundation

## **Projects**

## 1000 Cuts (Sept 2018 - June 2019)

- project completed as part of my paid part-time job at Virtual Reality Human Interaction Lab
- collaborated to migrate the game to the Unreal engine
- implemented the video functionality/logic on Unreal and editing on Adobe Premiere Pro
- utilized 3DS Max for modeling and UV wrapping along with lighting

# Computer Graphics and Imaging - 3 projects for Computer Graphics classes

- $\bullet$  used OpenGL, pbrt, and ray tracing to create a computer-generated image
- programmed in C++ using Visual Studio

## Graphic Novel Project (Sept 2018 - April 2019)

- collaborated to write and publish the graphic novel, *Flying Kites*, about the 2013 California Prison Hunger Strike
- designed the protagonist of the novel and delivered pitches for the plot
- planned and drew the storyboards for scenes in the book

## 1972 XA - Summer Science Program (Summer 2016)

- selective five-week research program hosted at New Mexico Institute of Technology by MIT and Caltech
- collaborated in a team of three to track and evaluate the 1972 XA's (asteroid) orbit
- utilized a combination of Python, physics, and calculus skills to analyze potential orbit paths