

LAUREN ZHANG

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INTERESTS: Entertainment Technology, Interactivity, New Media, Games, Computer Graphics

SKILLS

Languages: C, C#, Python, Javascript, HTML, CSS, Bash, SML, Java, WebGL

Rapid Prototyping: Unity, Blender, SolidWorks, laser cutting, 3D printing, Rhino/Grasshopper

Other: Git, Docker, Linux, p5.js, Howler.js, d3.js

EDUCATION

Carnegie Mellon University (CMU)

Pittsburgh, PA

B.S Computer Science 2021

Media Design Minor

GPA: 3.28

Relevant classes:

Math:

- 3D Calculus
- Linear Algebra
- Math Foundations of CS
- Great Theoretical Ideas in CS
- Probability Theory for CS

Programming:

- Intro to Computer Systems
- Imperative Programming
- Functional Programming
- Parallel Data Structures & Algorithms
- Computer Graphics*
- Software Security & Privacy*

Art:

- Interactivity & Computation
- Rapid Prototyping Technologies
- Experimental Animation
- Data Visualization*
- Reality Computing Studio*

* in progress

RESEARCH and EXPERIENCE

Software Development Intern

CREATE Lab | Carnegie Mellon University | Summer 2019

Developed new features for map data visualization tool using Javascript and WebGL shaders.

Improved website UI for browsing air quality sensor database.

Implemented histograms with d3.js.

Built Python web server API with Flask to serve combined data from different sources.

Software Engineering Intern

Northrop Grumman Corp. Mission Systems | San Diego, CA | Summer 2018

Built Python web app that displays information about containers on host server. Collaborated with other interns using Git. Obtained and formatted information with Docker Python API, HTML, CSS, Javascript.

PROJECTS

Map Voices (interactive map with sound)

CMU | Spring 2018 | Class/personal project

Rebuilt using using jQuery, Howler.js library, and Google Maps API to provide more flexibility and accessibility.

Originally built using C# in Unity. Visual-sonoral experience based on research addressing narratives of conflicts in Northern Ireland.

Game Creation Society

"Bird Quest" | Spring 2018

3D platformer game. Generated 3D graphics and animations in Blender.

"REM-EL" | Fall 2017

Hand animated 2D platformer game. Programmed with C# in Unity and helped with game design.

HackED

CMU | October 2017

Won 1st place with text-based adventure game to teach programming.

Programmed with HTML, Javascript, and CSS.

OTHER ACTIVITIES

Alpha Phi Omega Service Fraternity (Kappa Chapter)

CMU | Fall 2018-present

- *Assistant Pledgemaster (Spring 2019).* Help new members through the process of becoming a brother.
- *Mircrofell Leader.* Plan events for a small fellowship group.