LAUREN ZHANG

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INTERESTS: Technical Direction, Computer Graphics, Creative Technology, VR/AR, Front-End Web Development

EDUCATION

Carnegie Mellon University
Entertainment Technology Center
Pittsburgh, PA
Graduation: June 2022
Master of Entertainment Technology
B.S Computer Science
(accelerated master's program)

Elective Classes:
Entertainment Technology:
Building Virtual Worlds*
Visual Story*
ETC Fundamentals*

Interdisciplinary:
- Interactivity & Computation
- Rapid Prototyping Technologies
- Experimental Animation
- Reality Computing Studio

Math:
- Software Security & Privacy
- Discrete Differential Geometry

Programming:
- Computer Graphics
- Distributed Systems

*current

SKILLS

Languages*:* Javascript, HTML, CSS, C++, Python, C, WebGL, C#, Bash, SML
Other: Git, Unity, Docker, Linux, Visual Studio, React.js, p5.js, laser cutting, 3D printing, Blendr, SolidWorks

EXPERIENCE

Software Development Engineer Intern
Amazon Web Services | Portland, OR (Pittsburgh, PA remote) | Summer 2020
Created prototype proxy service between backend and frontend for Training and Certification team. Designed API and architecture. Built app with TypeScript and AWS AppSync, integrated other AWS services, and created custom testing tools.

Teaching Assistant (Rapid Prototyping Technologies)
Carnegie Mellon University | Fall 2019
Helped students on modeling, coding, laser cutting, 3D printing homework and in-class demos. Improved course materials.

Software Engineering and Visualization Design Intern
CREATE Lab (Carnegie Mellon University) | Summer 2019
Developed new features for Google Maps API-based map data visualization tool using d3.js, Javascript, JQuery, and WebGL shaders. Improved UI. 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 to display information about network of connected containers using Docker Python API, Flask, HTML, CSS, Javascript.

PROJECTS / RESEARCH

Accessible Imaging Platform Research
CMU | Spring 2020
Designed and built an accessible Python Jupyter Notebook library for image processing algorithms such as HDR and 3D scanning on tiny computers for creative and educational use.

Virtual CMU Fence Archiver
CMU | Fall 2019 | Class group project
Built web app to automatically transform 2D photos into a textured 3D model, viewable online. Used THREE.js, Node, Heroku and integrated work from 3D modeler and UI designer.

Chair Jam: Motion-Sensing Accessibility-Centered Game
CMU | October 2019 | Hackathon / Game Jam
Created collaborative game for varied mobility levels with a multidisciplinary team using Kinect and Unity.

Map Voices: interactive map with sound
CMU | Spring 2018 | Class / personal project
Built audio-visual, research-based experience exploring narratives of conflicts in Northern Ireland using C# in Unity.

Code Quest: Programming Education Game
CMU | October 2017 | Hackathon
Won 1st place with text-based adventure game to teach programming. Made with HTML, Javascript, and CSS.

OTHER ACTIVITIES

Alpha Phi Omega Service Fraternity (Kappa Chapter)

CMU | Fall 2018-present

Assistant Pledgemaster (2019). Guide and mentor new brothers.

Booth Chair (2019-present). Design and oversee construction of booth for Spring Carnival event.

Personal creative project work

Displayed work at the Frame Gallery(2020)

Sold work for ScottyCon Artist Alley (2019)