

Emily Hu

Contact

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[emily-hu.github.io](https://github.com/emily-hu)

Skills

Python

Javascript

React

Vue

HTML/CSS

Unity/C#

Java

C++

SQL

Select Coursework

Software Construction

Computer System Eng.

Algorithms

Computer Graphics

Advanced Game Studio

Multimodal User Interfaces

Data Visualization

Leadership

Software Studio

(Web Development)

TA, Fall 2020

- Taught web development, including HTML/CSS, Node, Vue

Interactive Music

Systems

TA, Spring 2019 and 2020

- Taught audio manipulation, interaction design using Python, Kivy

MIT Syncopasian

(a cappella)

President (2018)

Music Director (2019)

- Directed and organized committees, rehearsals, and communications
- Taught music and technique

Education

Massachusetts Institute of Technology (MIT)

Sep 2016 - Feb 2021

- B. S. in Computer Science and Engineering, Minor in Music GPA: 4.9/5.0
- Masters of Engineering in Electrical Engineering and Computer Science

Experience

Cruise, Mapping Team Software Intern

Jun 2019 - Aug 2019

- Revised and built features for the map pipeline UI
- Streamlined the pipeline for producing map changes, and improved the integrity of the retrieved data

Google, Engineering Practicum Intern

Jun 2018 - Aug 2018

- Designed and implemented a distributed pipeline (Apache Beam Python) to statistically analyze the quality of a large amount of labeled data for machine learning models
- Created metrics to evaluate the quality and consistency of data from multiple sources
- Created a visualization tool to inspect label quality metrics and determine sources of poor quality
- Automated pipeline to pull daily from fresh data

Twitch, Events Team Software Intern

Jan 2018

- Revised and improved the events-scheduling UI for streamers
- Incorporated metadata servicing for events

Locate, Software Intern

Jun 2017 - Aug 2017

- Developed end-to-end features for Locate's web app (Ruby on Rails)
- Built and designed database, backend logic, and UI/UX for data engine features which allowed users to upload and visualize thousands of data points at any time, and improved users' data upload/retrieval speed
- Developed permissions functionality for admins to login as any user

Huna Makia Inc., Software Intern

Jan 2017

- Designed and built a Chrome extension to ease job recruitment process
- Developed features for the web application

Projects

Dance2Music (Masters of Engineering Project)

Feb 2020 - Feb 2021

- Designed, developed, and evaluated a virtual reality dance experience where the music evolves based on the dancer's movements
- Developed in Unity using C#, with Oculus and Wwise integrations

Visualive

Mar 2019 - May 2019

- Created an online collaborative environment for exploring interactive data visualizations with a partner using D3

Project XYA

Sep 2019 - Dec 2019

- Designed and developed a virtual reality escape room with a small team using Unity

Square Wave

Oct 2018 - Dec 2018

- Designed and created a 2D musical puzzle platformer with a partner using Python with Kivy