

**WHAT CAN
YOU MAKE IN
THIS CLASS?**

ITP / INTERDISCIPLINARY RAPID SOFTWARE PROTOTYPING

PROJECT TOPICS

Interactive Installation (physical), museum interactive

Interactive Infographic/Data Visualization

Web app / Mobile web app

Physical objects generated by code (3d print/laser)

2d/3d game

Interactive digital art

AR/VR experience

Native iOS/Android app

Planetarium interactive/Gesture recognition

SOFTWARE SUGGESTIONS

Processing - visuals

p5.js – visuals, p5play

XOD – Arduino

RunwayML | Teachable Machine (Tutorials) AI

MadMapper – Projection Mapping

Spacebrew – Connect many things

A-Frame – VR (and AR)

PlayCanvas – VR/AR/Game Engine

HARDWARE

(THAT YOU CAN BORROW THIS SEMESTER)

Arduino, motors, sensors

Raspberry Pi

Kinect (v1 & v2)

Microphone

Webcam

iPad

Android tablets

Leap Motion

Audio Mixers

VR Headsets (oculus, vive)

Google cardboard

Projectors/Giant touch screen

Estimote Beacons (mobile app)

Makey Makey (with conductive ink?)

TV/Computer

3D Printers – Ultimaker (SH fab lab)

Laser Cutter

Router

MYO band

Muse headset

360° camera

PEOPLE

DALZIEL & POW

<https://vimeo.com/121878247>

<http://www.dalziel-pow.com/blog/zippy-digital-installations-making>

DOT DOT DOT

<http://dotdotdot.it/works/design-holding>

<http://dotdotdot.it/works/padua-botanical-garden>

similar work: <https://vimeo.com/92073935>

RAFAEL LOZANO- HEMMER

<http://www.lozano-hemmer.com/projects.php>

voice tunnel / voice array

open air

tape recorders

http://www.lozano-hemmer.com/pulse_index.php

<https://hirshhorn.si.edu/exhibitions/rafael-lozano-hemmer-pulse/>

<https://hirshhorn.si.edu/explore/press-images-rafael-lozano-hemmer-pulse/>

ZACH LIEBERMAN

<http://zach.li/>

RANDOM INTERNATIONAL

<http://random-international.com/work>

RAIN ROOM

Audience

fragments

BLUECADET

<https://www.bluecadet.com/>

museum / educational institutions - exhibits

BREAKFAST

<https://breakfastny.com/works>

DANIEL ROZIN

<http://www.smoothware.com/danny/>

THEO WATSON / EMILY GOBEILLE

<http://design-io.com/>

SHADOW MONSTERS

<http://www.moma.org/visit/calendar/exhibitions/1346>

https://www.youtube.com/watch?v=b_EQqQcqWXY

BEER FRIDGE

<https://www.dailymail.co.uk/video/news/video-1102827/Molson-beer-fridge-opens-sing-O-Canada.html>

<https://www.youtube.com/watch?v=-z9d1sk3N-M>

CONCEPTS

WEARABLES / CONDUCTIVE THINGS

<http://thecreatorsproject.vice.com/blog/gold-leaf-temporary-tattoos-user-interfaces>

<https://www.thisiscolossal.com/2020/01/steve-parker-brass-audio-sculpture/>

<https://www.bareconductive.com/>

PROJECTION MAPPING

<https://vimeo.com/33764021>

<http://www.fastcodesign.com/1663068/art-installation-bends-a-building-facade-to-the-sound-of-your-voice-video>

<https://vimeo.com/52444770>

<https://www.thisiscolossal.com/2013/01/origami-meets-projection-mapping/>

<https://vimeo.com/40157631>

NOT REALLY PROJECTION MAPPING

<http://www.thisiscolossal.com/2017/12/interactive-led-sculpture-projects-visitors-faces-14-feet-tall-in-columbus-oh/>

AUGMENTED REALITY

<https://medium.com/arjs/augmented-reality-in-10-lines-of-html-4e193ea9fdbf>

using <https://github.com/jeromeetienne/ar.js>

and <https://aframe.io/>

AR/VR

<https://aframe.io>

<https://experiments.withgoogle.com/collection/webvr>

vr prototype <https://blog.framer.com/comprehensive-guide-to-prototyping-vr-in-framer-29b7dd1bdd2a>

<https://github.com/playcanvas/playcanvas-ar> **with**
<https://playcanvas.com/>

<https://apps.apple.com/us/app/slide-ar/id1439367917>

<https://www.blippar.com/build-ar/augmented-reality-education>

<https://github.com/Sensorycc/YUXI-Mixed-Reality-Hardware-Toolkit>

DATAVIZ / INFOGRAPHIC

I have a full presentation about this... if you care...

**MORE
LINKS**

Scott Garner http://scott.j38.net/work/interactive/still_life/

Movie Visualization <http://gizmodo.com/5875455/this-is-what-movies-look-like-broken-down-by-color-and-motion>

Last Clock <http://vimeo.com/27975734>

Moving wall <https://vimeo.com/86905477>

Machine learning cartoon camera <https://danmacnish.com/2018/07/01/draw-this/>

Electrical signals of plants used to make art

<https://github.com/robbiebarrat/plant-art/blob/master/README.md>

Audio sensitive fonts <https://goertek.kontrapunkt.com/online/>

Weird faces vending machine <https://www.mokafolio.de/works/Weird-Faces-Vending-Machine>

All the minutes – twitter <http://alltheminutes.com/>

Find a painting like your face

http://thecreatorsproject.vice.com/en_au/blog/rijks-emotions-finds-your-face-in-a-classical-painting?utm_source=tcptwitteranz – uses <https://face-api.sightcorp.com/demo-basic/> ... perhaps a more modern library for faces: <https://handsfree.js.org/#/> or hands <https://towardsdatascience.com/handtrackjs-677c29c1d585>

Face Music <https://facethemusic.io/menu>

Interactive Bell

<https://www.instagram.com/p/B5VrcOjnELj/?igshid=kdutthqegu9t>