ANDREW ECCLES

aoe3@cornell.edu | andrewe.cc | github.com/aoe3 | linkedin.com/in/andrewoe

EDUCATION

Cornell University, B.A. Information Science, Concentration in HCI and Information Systems 5/2017

WORK EXPERIENCE

Freelance Web Designer/Media Producer 12/2017 – present

- Created portfolio sites for young artists/media creators using basic ReactJS.
- Built promotional material with Adobe Creative Suite, frame animation, and basic sound-editing tools.

Cornell Institute for Healthy Futures (CIHF) – Web Developer 2/2016 – 5/2017

- Used HTML/CSS to build and conduct maintenance on website visited by companies working with the institute, such as: Deloitte, Hilton, Perkins Eastman and Cancer Treatment Centers of America.
- Revised WordPress' templates with custom CSS styling without administrative privileges.
- Expanded the former shell of a WordPress site to the current structure used today.

Cornell University Department of Computing & Information Science – Teaching Assistant 1/2017 – 5/2017

- Assisted in lectures of 300 students by spotting those struggling to follow along & helping to debug code.
- Held office hours for homework/project help: taught D3, critiqued visualizations, and helped with code.

PROJECTS

Mesh Generator *(Java; team of two)*

- Built a mesh generation/processing utility that could approximate curved surfaces.
- Final product could read/write meshes in OBJ format, calculate vertex normals, and apply textures.

Ray Tracer *(Java; team of two)*

- Constructed a light-ray generation/intersection interface for rendering scenes in XML files.
- Handled antialiasing and point and area light sources to illuminate objects, including glass.
- Used an accelerated tree structure to represent scenes, so as to increase performance time.

Shader *(three.js, WebGL; team of two)*

- Implemented Cook-Torrance shader with texture-mapped diffuse component.
- Created specular reflection under environment lighting, as well as a normal mapping shader.
- Built a displacement mapping shader to increase perception of textures.

Chalk Printer *(Arduino, 3D-printing; team of three)*

- Took concept of chalk printer from idea to fully-functional product.
- Final product could print letters, numbers, punctuation, and some emojis.

Bigfoot Sightings (*HTML/CSS, D3.js; team of three*)

- Cleaned large data files to pinpoint location of Bigfoot sightings across the U.S.
- Used D3 to compare findings with data about weather, population, etc., to spot correlations.

GEN1 (*Balsamiq, inVision, IRB research guidelines; team of five*)

- Conducted user research with first-generation college students to identify problems with adjusting.
- Prototyped a mobile app for connecting first-gen students with one another and providing resources.

SKILLS *(listed in order of proficiency)*

Languages: HTML/CSS, JavaScript, Java, SQL, Python
Frameworks/Libraries: D3.js, jQuery, Arduino
Other: Adobe After Effects, Autodesk Inventor, 3D-Printing, Prototyping, Adobe PhotoShop

COURSEWORK

Software Dev	Object-Oriented Programming & Data Structures, Data Structures & Functional Programming, Intro to Computer Graphics, Foundations of Artificial Intelligence
Web Dev	Intermediate Design & Programming for the Web, Data-Driven Web Applications
Product Dev	Intro to Rapid Prototyping & Physical Computing; Human Computer Interaction Design