Daisy Zheng

302 Bryant Ave. #3, Ithaca, NY 14850
dhz9@cornell.edu | (203) 731-0152 | http://daisyzheng.me

EDUCATION

Cornell University
College of Engineering
Major: Computer Science, B.S. Minor: Biology
Expected Graduation: May 2018 GPA: 3.54

EXPERIENCE

Biogen June 2017 – August 2017
Enterprise Architecture Intern

- Built a 3D neuron tracer and dendritic spine detector that automates the time-consuming and labor-intensive task of manually analyzing neuron scans, paving the way for target screening capabilities with reduced bias
- Tackled an industry challenge that has so far been met with limited success, providing a proof of concept that reduces the risk for the business to pursue the area further

Game Design Initiative at Cornell January 2017 – May 2017
Acknowledged MVP, Graphics Lead of 6-student team

- Developed a fully functional and unique video game during the course of the semester and released it to the public at the GDIAC Showcase – *won 3rd place Audience Choice award*
- Led the implementation of the fog and visibility system – a major game mechanic – along with the visual effects shaders and sprite drawing; worked closely with the rest of the team to design and build the game concept and engine

Infinity ProAV June 2016 – August 2016
Computer Vision Intern

- Worked with a stereo camera system to reconstruct a 3D mesh of the environment from 2D photos and extract the foreground object of interest using Python
- Optimized the stereo algorithm for use in real-time detection of vehicles

SKILLS

Python, Java, OCaml, JavaScript, HTML/CSS, D3, LibGDX, Box2D

PROJECTS

- Interactive data visualization of educational standards and crosswalks. Possesses a clean design for easy identification of hierarchal and cross-standard relationships and detailed information to assist with curriculum planning. *JavaScript, HTML, D3. Mindsumo challenge winner*
- Multiplayer Texas Hold Em' implementation with support for up to 10 human players in addition to a single player mode against an AI opponent. Includes a graphical user interface. *OCaml, CS 3110 project, team of 3*
- Ray tracer used for rendering realistic lighting and shadows in mesh scenes with various light sources and materials – supports Lambert, Phong, and Cook-Torrance materials, Monte-Carlo and point light illumination, and texture and environment mapping. *Java, CS 4620 project, team of 2*

RELEVANT COURSES

- Introduction to Computer Graphics and Practicum (CS 4620/1)
- Introduction to Computer Game Architecture (CS 3152)
- Introduction to Computer Vision (CS 4670)
- Introduction to Analysis of Algorithms (CS 4820)
- Operating Systems (CS 4410)
- Data Structures and Functional Programming (CS 3110)