

ELLEN CHOI

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ellenchoi97.github.io

EDUCATION

University of California, San Diego
B.S. in Mathematics – Computer Science

September 2015 – March 2019

EXPERIENCE

Code Coach, theCoderSchool

September 2018 – Present
Rancho Penasquitos, CA

- Instruct students ages 7-15 on programming concepts using Scratch, Python, and HTML/CSS/JavaScript
- Research technologies (i.e. mBot, Pixelpad, Pygame) and develop programs for lessons to match students' skills and interests
- Prepare students for the CoderFair – a science fair-like event for students at the location to present their coding projects – by assisting with code development and creating project pitches

PROJECTS

Finding Mochi, C++, OpenGL

ellenchoi97.github.io/finding_mochi.html

- A 3D game based on the movie Big Hero 6 where Baymax must navigate through the city and catch Mochi the cat. Created in collaboration with two other students.
- Technical features demonstrated: Texture mapping, toon shading, procedural modeling, diamond-square algorithm, L-systems, and collision detection with bounding spheres, skybox, continuous Bezier patches

MemeMaster, HTML, CSS, JavaScript, Google Firebase

ellenchoi97.github.io/meme_master.html

- A CRUD web application that allows the user to sign into an account and edit images to create memes. Created in collaboration with another student.

Adventure Machine VR, Unity, Oculus Rift

ellenchoi97.github.io/adventure_machine_vr.html

- A VR program that imitates a bedroom where the user can interact with the launchpad and piano keyboard to make music. Created in collaboration with another student.
- Technical features demonstrated: Selection and manipulation using a virtual hand, teleportation with ray-casting, grabbing the air technique, system controls with dials and settings menu, interactive tutorial

SKILLS

Familiar

HTML/CSS/JavaScript
Unity/C#

Intermediate

Python
C/C++
OpenGL

Advanced

Java

EXTRACURRICULAR

Education Corps – Student Leader and Volunteer Tutor
National Residence Hall Honorary – General Body Member
Revelle Hall Association – General Body Member

September 2015 – June 2019
May 2017 – June 2019
September 2015 – June 2017