

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

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

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.

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