Zhian Li
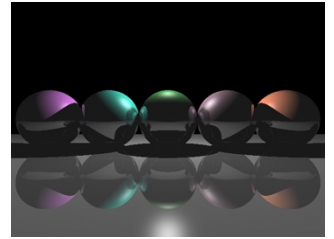
Master of Computer Science 23' & Trojan Marching Band Trumpet 19 - Present
University of Southern California, Los Angeles, CA
Resume: Download Here

Objective
- Current Master's Student with specialty in Computer Graphics and Game Development.
- Experienced working in teams with diverse compositions, large or small, remote or in-person.
- Proactive individual currently seeking animation and game internships opportunities.

Education
- M.S. in Computer Science (Progressive Degree Program)
  January 2022 – May 2023
- B.S. in Computer Science
  August 2018 – December 2022

Honors
- Dean's List four years in a row (2018, 2019, 2020, 2021)

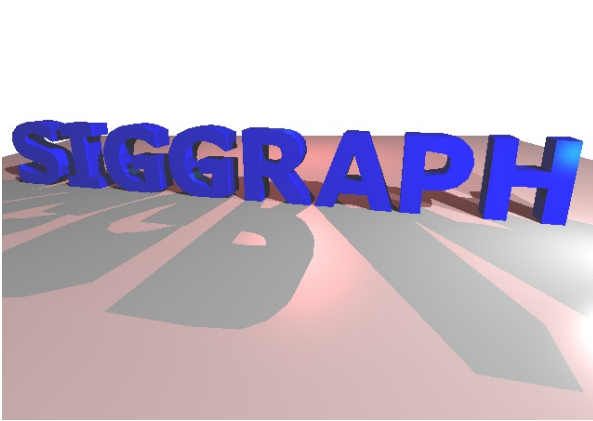## Skills

Languages:
C++, Python, Java

Tools:
Maya, OpenGL, MySQL, TensorFlow, Git

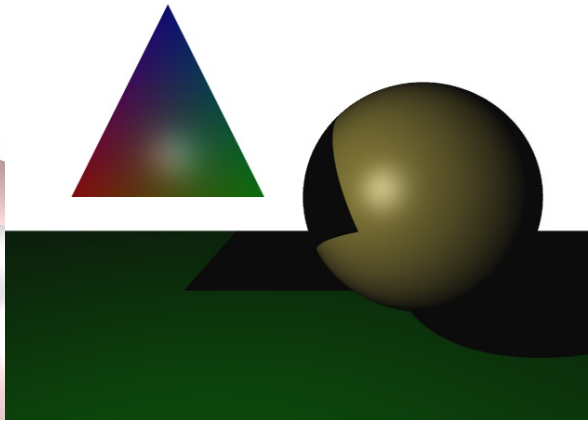**Ray-Tracer using OpenGL**

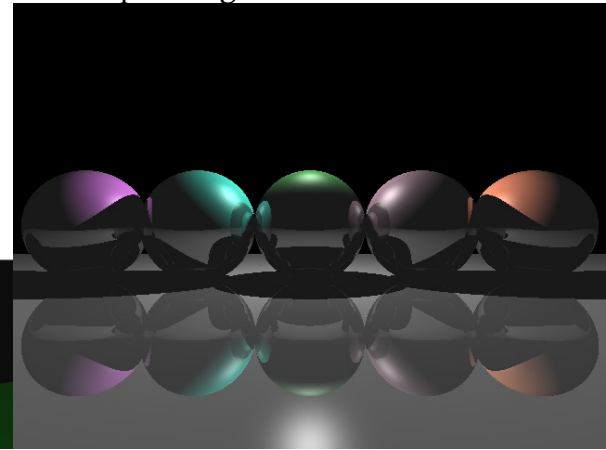A simple ray-tracer that can accurately capture shadow and reflections, here are some of the simple image

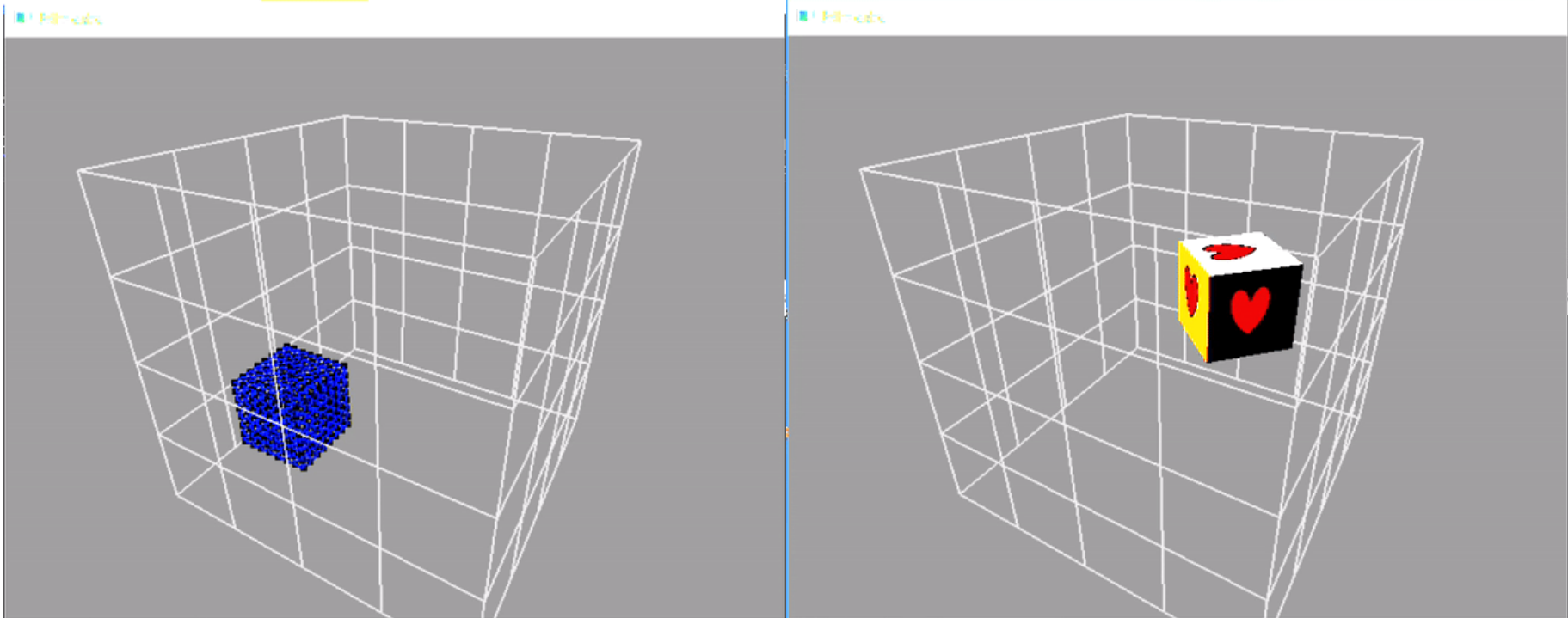(i)   (ii)   (iii)

(i): Shadow and specular reflection for complex geometry
(ii): Anti-aliasing using super sampling methods for simple objects
(iii): Multiple reflection for marbles and glass table

Physics based jello-cube simulator
A jello-cube simulated using a mess spring system with Runge-Kutta integrator, rendered with OpenGL

Left: The bouncing effect when the cube hits hidden walls.
Right: Movement of the cube when OpenGL texture is enabled.

Portfolio

Motion Capture Data Interpolator using Quaternions

Using quaternions and Bezier curve to interpolate missing data in motion capture sequence.

Original motion from CMU Motion Capture Lab shown in red and interpolated motion shown in green

Rendering software written by Steve Lin, Alla, Kiran, Jernej Barbic, and Yili Zhao.
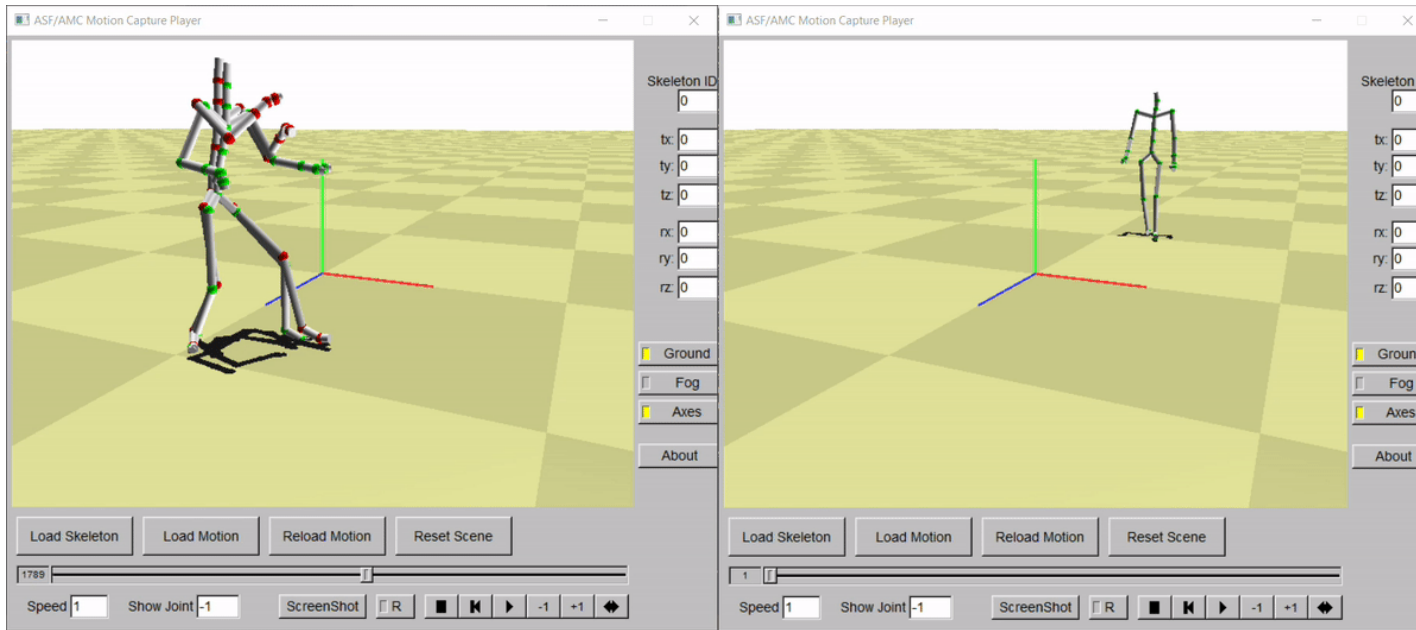
(i) Martial Art Sequence   (ii) Walking sequence