CS 450/550 Fall Quarter 2023
Final Project Video Gallery

Andy Li
Raytraced Leaves and Spheres
https://youtu.be/lvB3Ay6rgA

Ananya Sundararajan
A simple game to capture Pokemons
https://media.oregonstate.edu/media/t/1_0ax837s7

Alex Hollinghead
I created a shell texturing shader to create a grass or fur effect that can be applied to different geometries.
https://media.oregonstate.edu/media/t/1_66prr3a1

Nelson van de Lindt
Nuclear Fusion tokamak explanatory animation
https://media.oregonstate.edu/media/t/1_8hgsylvh

Matthew Hearne
Starship to the Moon
https://media.oregonstate.edu/media/t/1_i9vaxt8k

Dunia Karaki
THE FINALHAZARD (The final boss fight of Sonic Adventure 2) The first half focuses on Super Sonic ‘attacking’ the biolizard, but getting hit by the laser and being sent back to the starting position. Like the game, he backflips to the start. This loops a few times. The next part focuses on Super Shadow collecting rings on the other side, with the rings actually ‘disappearing’ when he appears to go over them. Afterwards are just some views to show the scene and how everything is set up.

Jameson Yee
User-interactable Gerstner Wave simulator

Abhishek Patel
Solar system
https://media.oregonstate.edu/media/t/1_qi464cwx
David Abiola
Animation of the Solar System
https://media.oregonstate.edu/media/t/1_tq0wel7g

Ashwanth
A spaceship maneuvers around planets and shoots down other spaceships. The animations were done using key time. The planets had textures.
https://media.oregonstate.edu/media/t/1_tdeglyw7

Viacheslav Tekaev
3D particle-based fluid simulation
https://media.oregonstate.edu/media/t/1_n3gy29sd

Gwenn
A day at the park- includes lighting, animation, instancing, texture
https://media.oregonstate.edu/media/t/1_3s0yhxpn

Jenny
Biplanes KeyTime Animation
https://media.oregonstate.edu/media/t/1_vcw48ioc

Oria Weng
Bread builder - build a ring of custom castles made of bread!
https://youtu.be/tkrcpC9ld6I

Taylor Homan
A short animation of the TARDIS (Doctor Who) flying to different places.
https://media.oregonstate.edu/media/t/1_580hgxw4

Breanna Tran
Butterfly flying and landing on a lotus flower to pollinate it
https://media.oregonstate.edu/media/t/1_b0r00la4

Casey Anderson
I recreated a working watch using OpenGL that tells the current time. Realistic hand movements that update each frame (60 fps).
https://media.oregonstate.edu/media/t/1_p2g7mmpd

A snow globe with a snow man, cabin, and falling snow
https://media.oregonstate.edu/media/t/1_zq42b4ut
Steven Tran
Bowling Alley TV Monitor animation for when you score three consecutive strikes. Otherwise known as a "Turkey".
https://media.oregonstate.edu/media/t/1_j6o6xqes

Joe Witte
This is an interactive "fractal forest" containing 450 fractal trees. The program implements levels of detail, billboardling, mipmapping, and frustum culling in order to improve performance.
https://media.oregonstate.edu/media/t/1_s0zeb3ea

Craig Harris
The Legend of Zelda: A Link to the Past opening title card in OpenGL.
https://www.youtube.com/watch?v=-wlZx1zSGcs

Aylee Shomali
The ice cream cone that fell on the marble floor - An animating ice cream cone that falls and changes color with the splatter modeled using Blender's metaball modeling tool.
https://media.oregonstate.edu/media/t/1_5or4uvov

Amy
Pokemon trainer battle. You can select Bulbasaur's moves!
https://media.oregonstate.edu/media/t/1_4v4aq9c8

Bogdan Gevko
A 3d scene demonstrating textures, shaders, lighting, animations, and shadows.
https://media.oregonstate.edu/media/t/1_k8y0szbn

Beck Lindstrom
Robot Arm Moves doughnut
https://www.dropbox.com/scl/fi/tunh5rjk99whg9jyu0fbl/CS450FinalProject.mov?rlkey=a9evrh20fhu9si75z8xemn7p&dl=0

Jeremy Prater
A procedual height map terrain with a skybox, Gerstner waves/water, shadow mapping, procedural generated fish, rocks, and plants.
https://media.oregonstate.edu/media/t/1_qf6i2w2a

Thao Thomas
Turning Lantern
https://media.oregonstate.edu/media/t/1_wvogin7f

A campground scene with a revolving night/day sky, a fire, and fireflies.
https://media.oregonstate.edu/media/t/1_27uyqf9y
Joshua Bowles
I created a very simple Minecraft shader. Custom Minecraft shaders use GLSL and are an excellent way to learn how GLSL works in a practical environment. Shaders can be loaded on the fly and modified in (close to) real time as you play the game. I found it was an excellent way to clearly visualize the effects of modifying various aspects of the vertex and fragment shader. Most of the information I used that was specific to Minecraft was found in the ShaderLabs community https://youtu.be/MrPlrN2kF2I

Jude Williams
Attempted to recreate a section of the original 1982 Tron light cycle sequence. Created my own light cycle in Blender inspired by the original, and attempted to recreate a section shot-for-shot. https://media.oregonstate.edu/media/t/1_hxmkwun3

Marc Zalik
An interactive animation of the James Webb Space Telescope in its halo orbit around Lagrange point L2. Users can watch the Earth, Moon, and JWST as they orbit around the Sun. Users can also enter Telescope view mode, in which they can view different parts of the cosmos as they control the direction of the telescope. https://media.oregonstate.edu/media/t/1_3vyk79cf

Yun Hsuan Chan
Fireworks! https://media.oregonstate.edu/media/t/1_22szs59r

Christopher Weinert
My final project was a model of the Sun-Mars-Moons. In it, Mars orbits around the sun while its two moons Phobos and Deimos, orbit around Mars. The viewer can change the eye position from an outside view of the orbital system or position the viewing eye on Mars, Phobos, or Deimos. https://media.oregonstate.edu/media/t/1_kv5xmac

Subramanya Keshavamurthy
Nuclear Fission https://media.oregonstate.edu/media/t/1_09hglnpd

Vanessa Dowd
A cherry blossom opening and closing. I used Blender to craft the petals and animated them to open when the sun was orbiting above the flower and close when it went away. I used keytime animation to orbit the light source like the sun. https://media.oregonstate.edu/media/t/1_mr31qm39

Andrew Osborne
Fly-by past the USS Enterprise (NCC-1701-D) from The Next Generation https://media.oregonstate.edu/media/t/1_9azaocay
**Jillian Vondy**
For my final project I modeled a lotus flower and a leaf using Blender, created and applied textures to the parts of the plant, and animated the petals so that the flowers appear to bloom.
https://media.oregonstate.edu/media/t/1_l4qzh6d1

**Ethan Masiel**
3D scene generated with the assistance of ChatGPT
https://media.oregonstate.edu/media/t/1_wodvzteu

**Bhavan Vasu**
The project described in the video is a prototype for a driving simulator for understanding US traffic laws inside a "Glass Dome" according to Newton's Laws of Motion for rigid bodies. It utilizes concepts such as Translation for movement, Lighting for the Sun, Shaders for coloring cars, and texture mapping for the Sky, Grass, Road, Traffic Signs, and Bridges. The "Glass Dome" is an idea to simulate best the relative motion of the sky to the car. It involves mapping an image of a sky inside a sphere while the sphere is translated and/or rotated based on the car's movement.
https://media.oregonstate.edu/media/t/1_a5p6kw5v

**Jolene Farley**
An animation of a popcorn machine. The animation shows 500 pieces of popcorn popping out of a kettle and falling to the floor of the machine. Each piece travels on a parabola in a random direction and has the potential to bounce on landing to a final resting spot. As time increases, the pieces appear to "pile up," resting in increasingly high y-values. Each run of the program randomly generates the order of the pieces, their shapes and colors (from one of three options), and their direction of movement/resting spot.
https://media.oregonstate.edu/media/t/1_1l1x7wql

**Franchesca Mayi**
Small Forest.
https://media.oregonstate.edu/media/t/1_p82k20lc

**Rebecca Klump**
Terrain generator using vertex and fragment shaders
https://media.oregonstate.edu/media/1_girhf2ka

**Thao Ly**
I created an 11 second keytime animation of a pinball machine I personally designed. The objects in the animation are a combination of OpenGL primitives and exported obj files from an online 3D CAD program. I make use of textures for the backdrop of the machine and provide different lighting options that can be accessed by toggling the L key.
https://drive.google.com/file/d/16hU5e3-Q9O6bRq6LnVcaCNo6xr5wp2l0/view
Matthew Hearne
SpaceX Starship Launch to the Moon
https://media.oregonstate.edu/media/t/1_i9vaxt8k

Brittaney Nicole Davis (Nico)
A scene from Star Trek III: The Search for Spock, in which the crew aboard the Enterprise returns to the planet Genesis to rescue Spock.
https://media.oregonstate.edu/media/1_f9bpqsgq0

Kelly Walls
My final project is a 10-second animation of a snow globe being shaken. Using keytime animation, the snow globe is shaken side to side, and then the snow falls to the original position.
https://media.oregonstate.edu/media/t/1_3deu3mv6

Feipeng Yue
Sun-Earth-Moon System!
https://media.oregonstate.edu/media/t/1_cfd5qany

Li-Hsin, Chiang
I crafted a glass bus stop that stands resilient in the rain, capturing reflections of the serene sky. Positioned on a lush lawn adorned with vibrant pink and yellow flowers, the scene exudes a harmonious blend of modernity and nature.
https://media.oregonstate.edu/media/t/1_e2mauwq7