

FAMU-FSU
College of
Engineering

FAMU-FSU AI-VR C.O.E. Museum

Sponsored by:



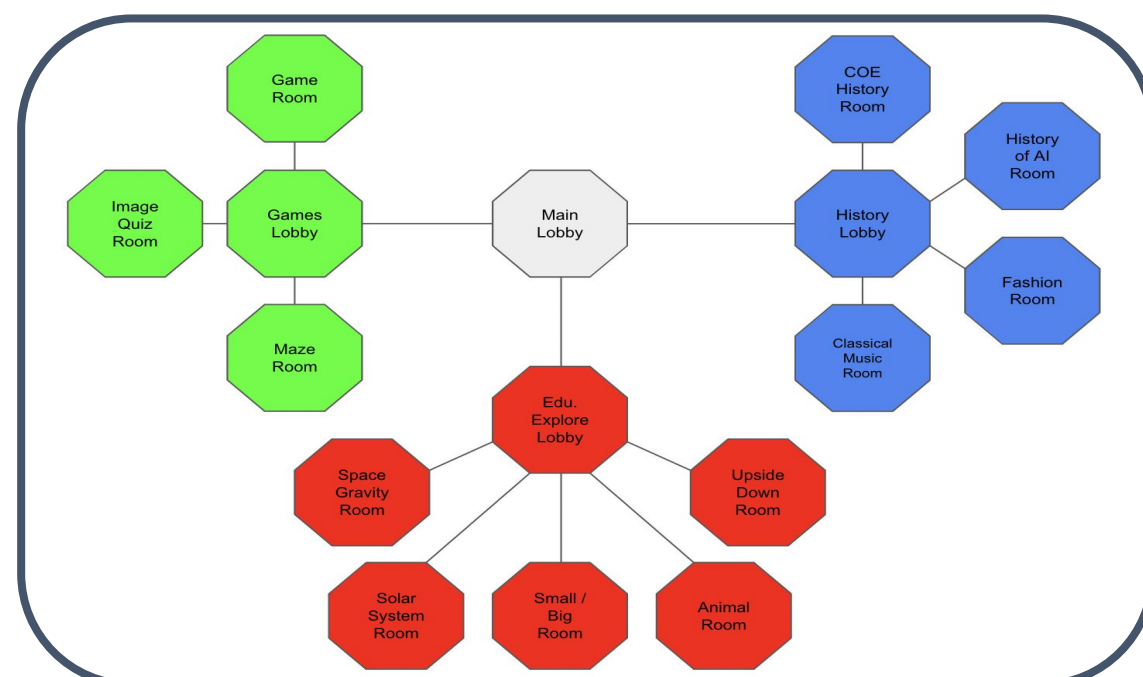
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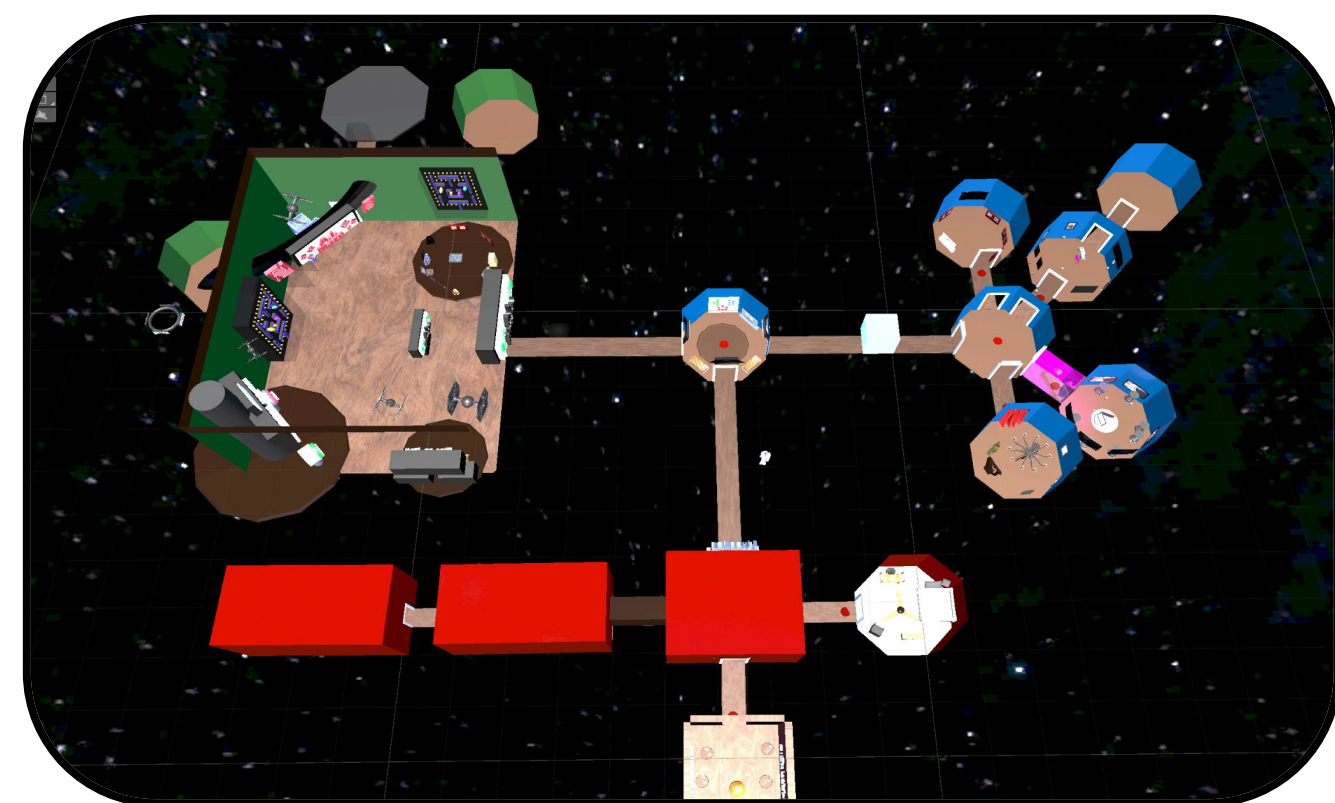
Introduction

- Artistic/creative museum in Virtual Reality
 - Users will be able to explore and interact with numerous exhibits
 - Immersive environment
- Uses Unity/Blender for graphics and models
- Users should be able to interact with the museum via headset controls
 - Microphone included in headset
- Certain aspects should use Artificial Intelligence
 - Some art and images will be AI-generated
 - Sounds and voices can be AI-generated

Purpose: Educate and entertain anyone interested in STEM or the arts in a fun interactive way. To inspire passion about the collusion of the arts and sciences.



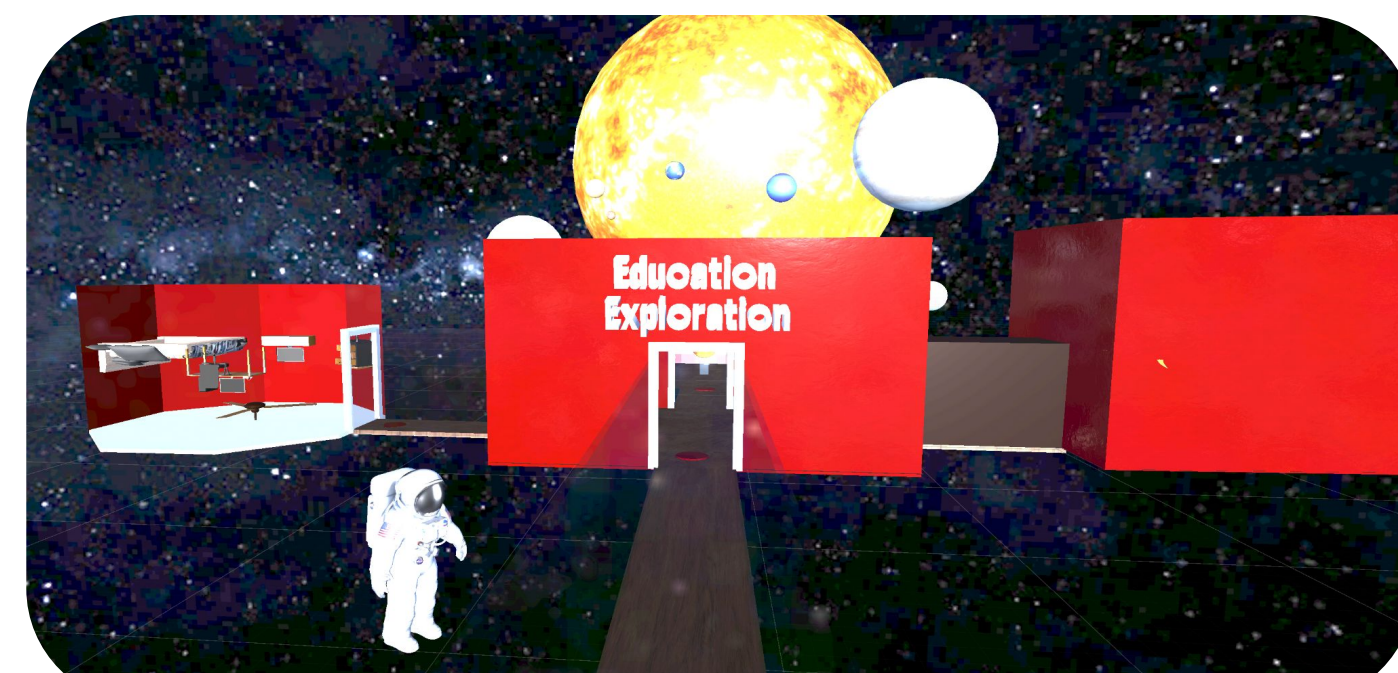
Map displayed in central lobby for navigation



Museum Exhibits

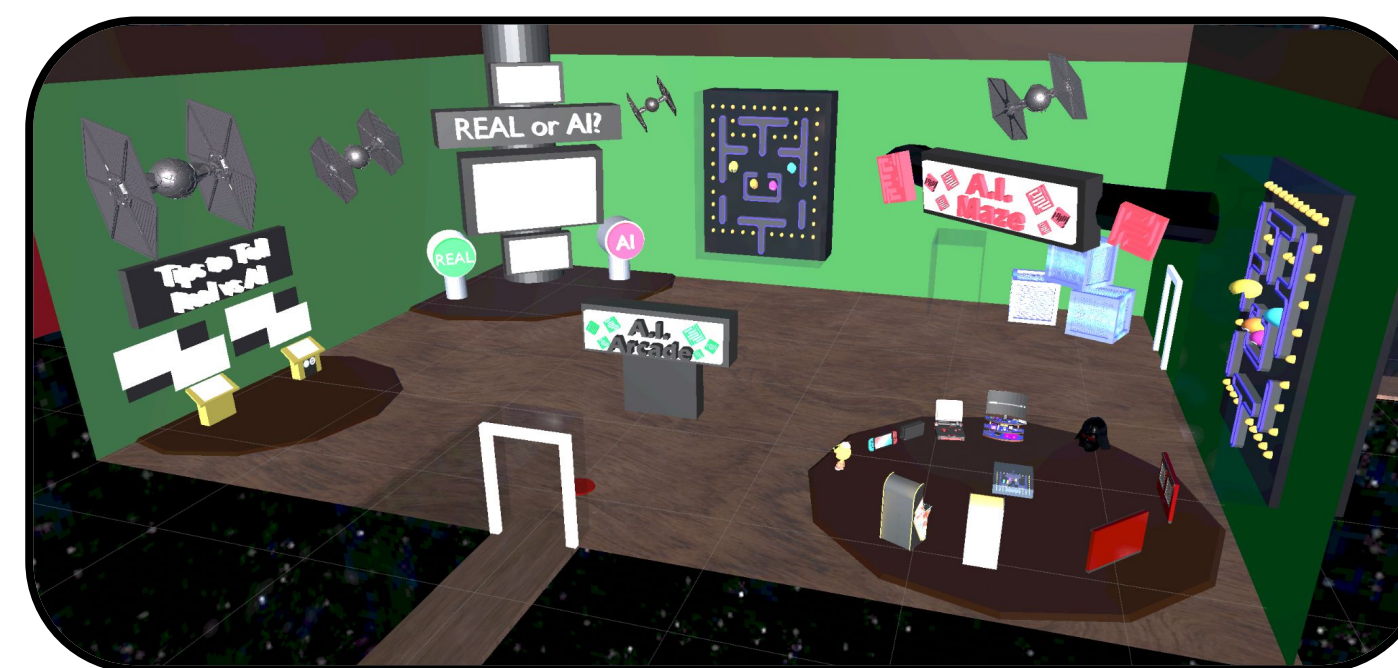
1. Education Wing

1. Space Gravity Room
2. Planetarium
3. Animal Room



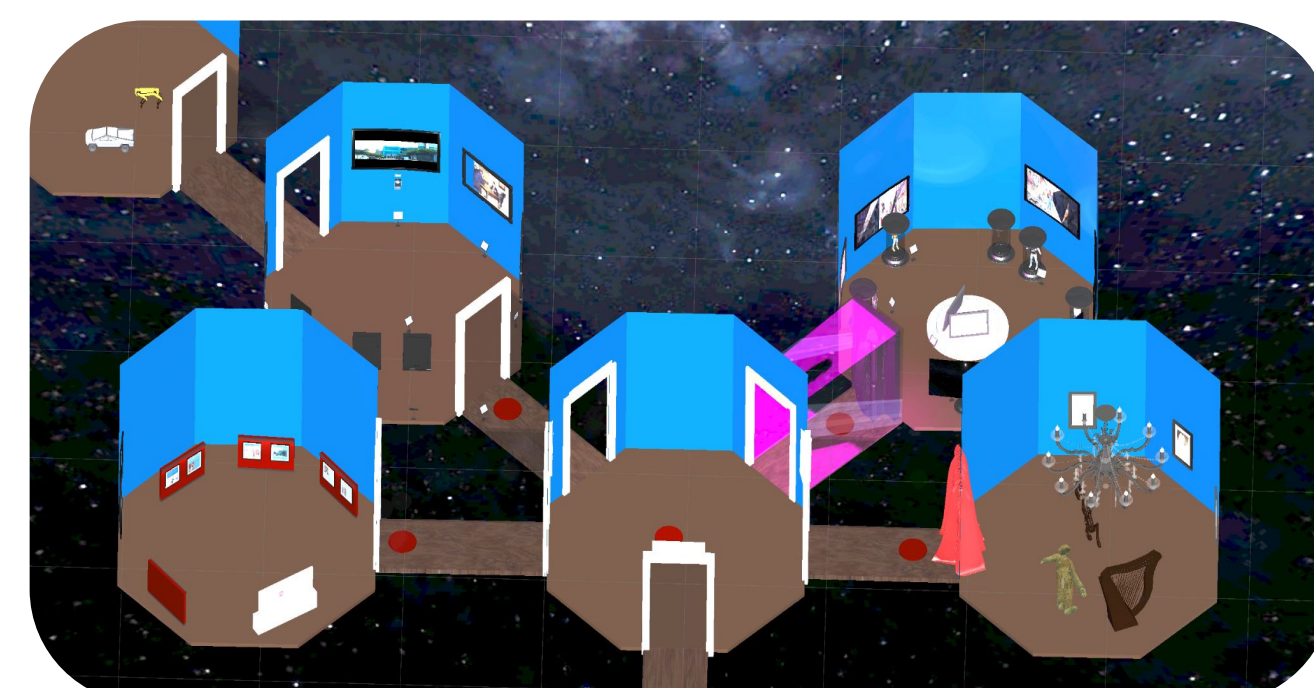
2. A.I. Arcade

4. Real or AI? Quiz Game
5. A.I. Generated Maze
6. Game Station

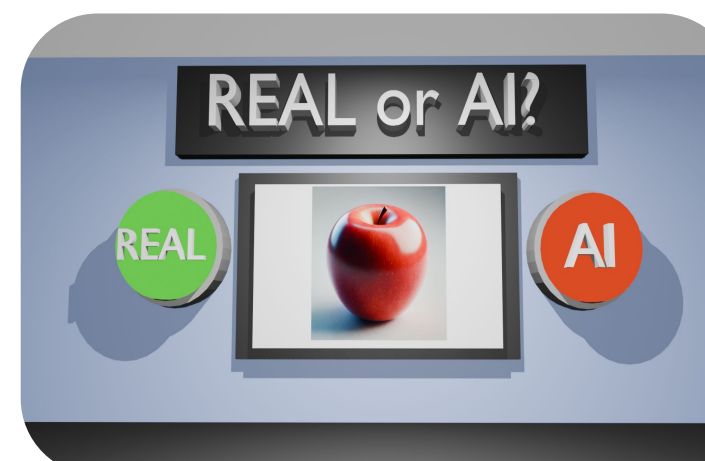


3. History Wing

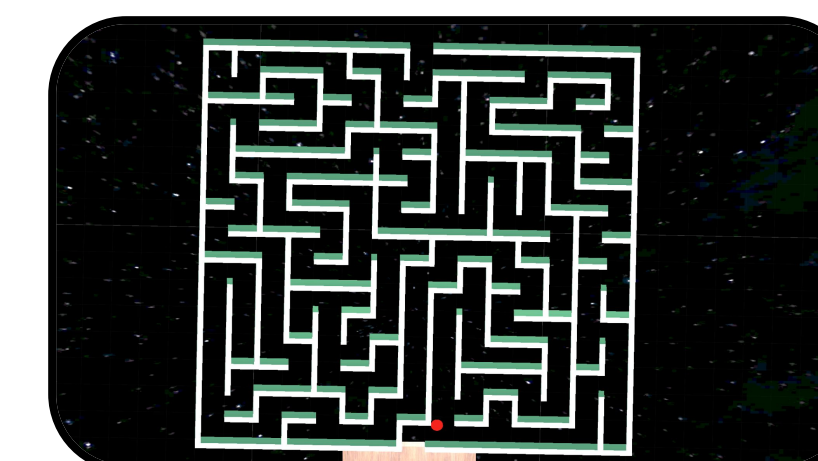
7. History of Fashion Room
8. History of AI Room
9. FAMU-FSU COE History Room



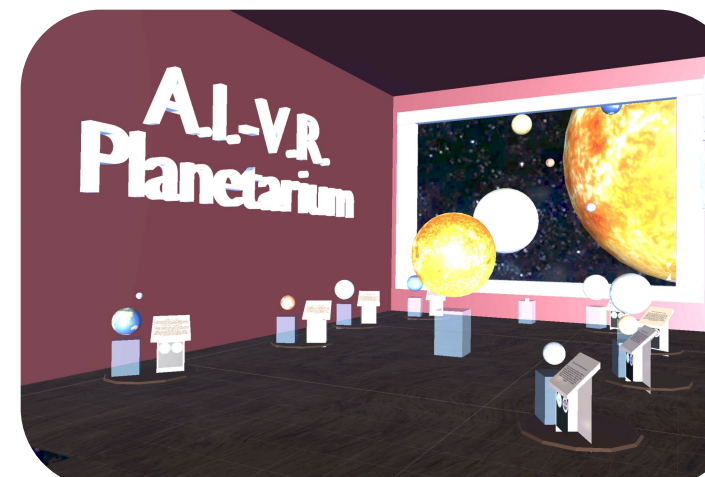
Exhibits (Cont.)



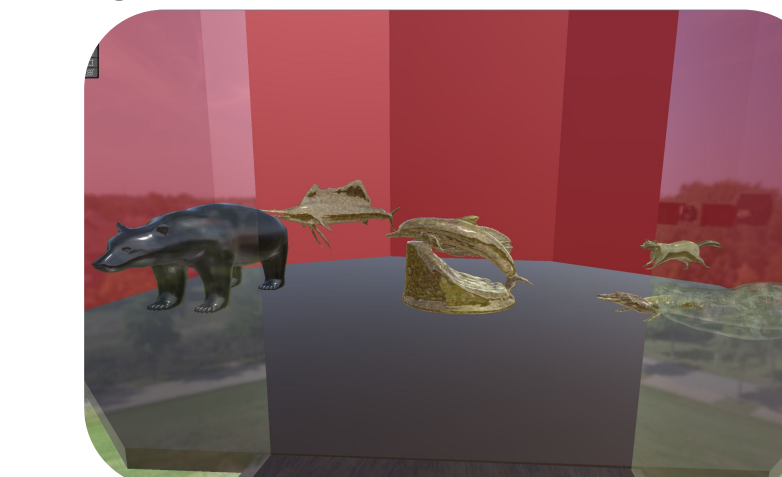
Interactive Real or AI Quiz Game



3D AI Maze that generates in real time



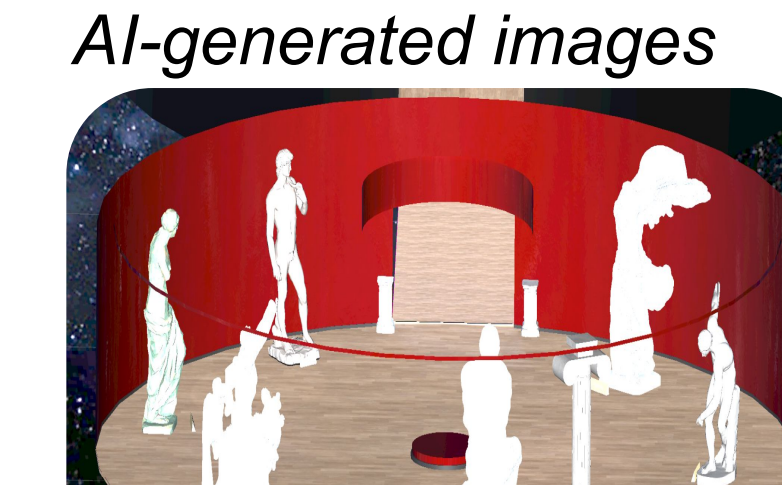
Planetarium room with animated planets



Animal room with native Florida animals and AI-generated images



Fashion History Room



Sculpture Room



African Culture Room with AI generated music and images

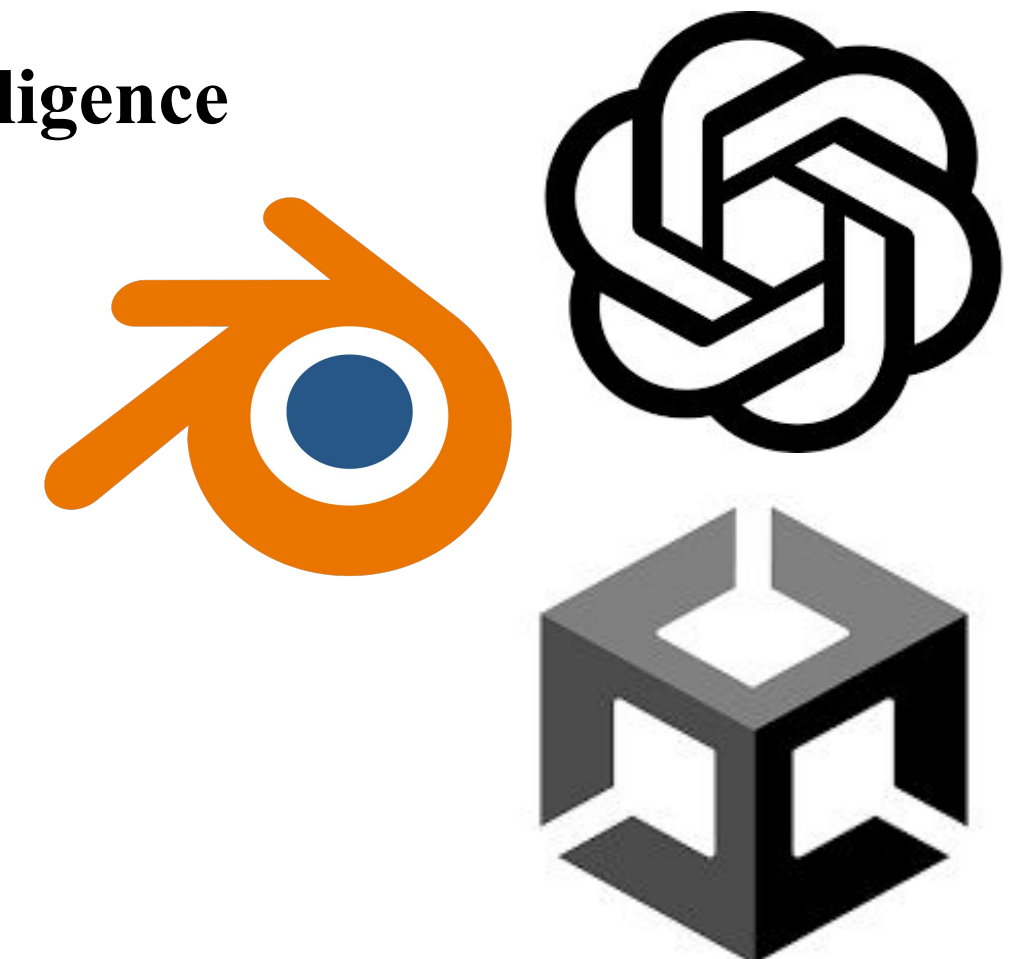


History of AI Room

Tools Used

Artificial Intelligence

- ChatGPT
- Midjourney
- Suno



3D modelling

- Blender
- Sketchfab

Game Engine

- Unity

- ChatGPT used to help implement interactive elements and debug issues within the museum
- Midjourney used for historical and artistic exhibits
- Suno used to design immersive elements for the museum such as music
- Blender and sketchfab used to create/import models and create an environment for the user to explore
- Unity used to code and run the museum, enabling us to bring the museum to life in a 3D virtual reality environment

Results

- Designed a Virtual reality museum that explores the intersection of arts, science and artificial intelligence
- Runs at a stable frame rate of 90 fps
- Implements Artificial Intelligence for immersive and interactive elements



Download / Create
3D Models on Blender
or Sketchfab



Import 3D
models into
Blender for
editing



Develop
Museum in
Unity
using models



Verify models
and VR
support in
Unity