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Suzhou Garden in VR

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Abstract — This demo shows the making an interactive garden using VR in Unreal Engine. For this project, I created Suzhou Garden a type of garden from the past that involves constructed landscapes. The game requires entire body coordination and enables players to learn about Chinese architecture. Keywords — cultural heritage objects, digital modeling, realistic- rendering, interactive computer graphics

Keywords— Interactive, VR, Chinese architecture, garden, environment, game, Lego, play

Classical Suzhou garden is a type of garden which is really popular from Southern Song to late Qing dynasties (11th to 19th century). This design involves constructed landscape that mimics grand nature view such as waterfalls, rivers, hills, rocks, and mountains. This VR project is a personal humble mimicking of one Suzhou gardens. The project is still in its development stage



Figure 1 – The main character watches a secondary character swing, as the Inferno rises.
<https://youtu.be/DzPThAkU8lw>.

VR.

VR can provide an immersive experience.

You can enjoy an environment million miles or even a million years ago by using a VR device. The headset enables you to see things around you; the controller enables you to touch and feel the object inside. When first experienced, VR is a magical feeling. Even after working on this project and exploring a bit of the VR world, I still feel excited to wearing the headset to play any VR game or enter any VR environment every time. This project is just an attempt to create a grand VR world.

Inside the garden, players can look around, pick up the stones, cross the bridge, jump into the water, and using Legos to build your own Chinese architecture. The environment and game play are meant to be fun and challenging.

UNREAL ENGINE, 3D DESIGN

The project is accomplished by using Unreal Engine 4 (UE4), Maya, and Substance Painter. To begin, I built a high poly count models of the architecture, and used a low