VISTICS

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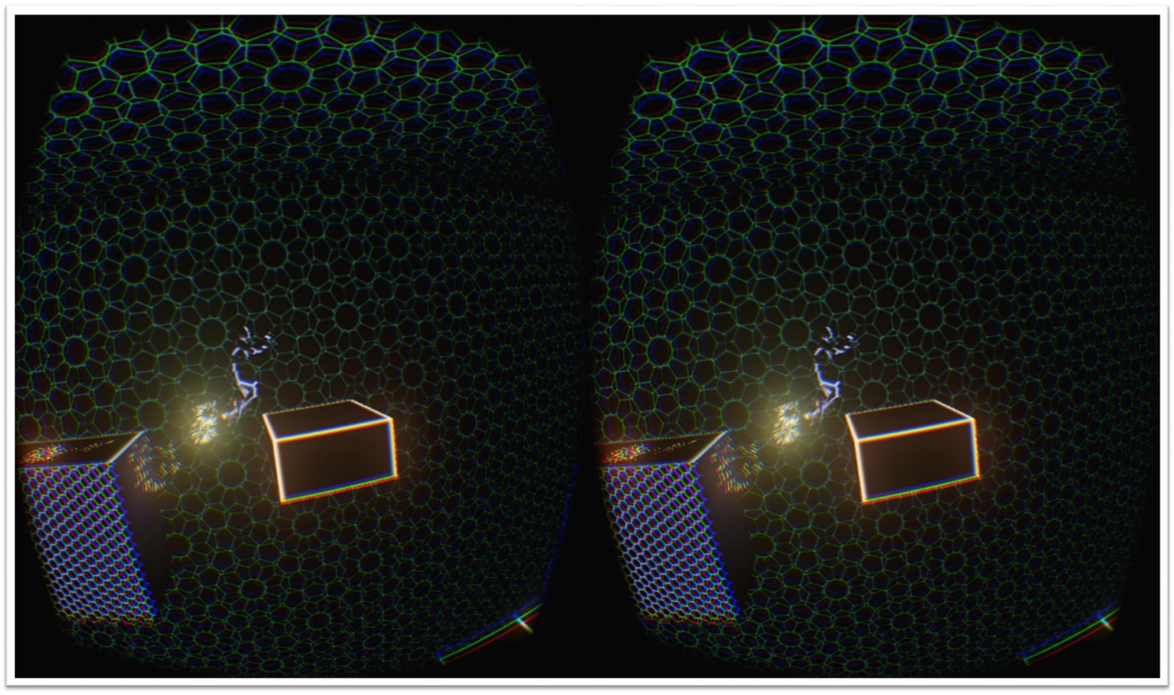
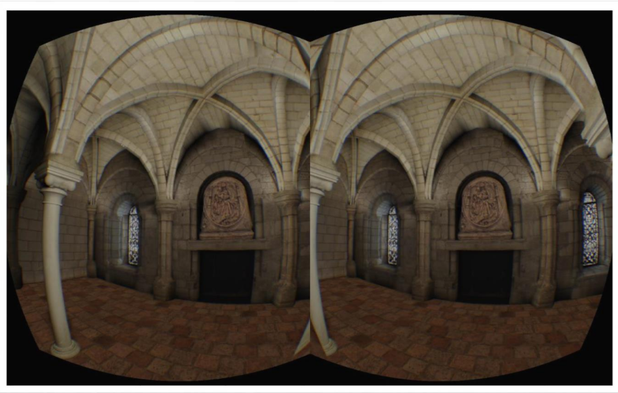
ABSTRACT

Vistics is a 2.5D platformer game for virtual reality devices such as the Oculus Rift. One of the major software goals in the Vistics design is to reduce the effects of simulation sickness in virtual reality devices. On the technical side, Vistics needs to achieve a low enough rendering time that matches the refresh rate of the device of the Oculus Rift - 90 Hz (also known as 90 frames per seconds). Additionally, the camera in the game must be capable of updating in under 16ms. This means that when the user changes their head position in the real world, the camera in the game must respond in less than 1/6th of a second. The camera system in Vistics is also designed to account for locomotion. Since the game world is moving as the player moves their head, the camera system must take this dual movement system into account. These issues are solved by designing and developing optimized software that can run on the PC hardware designed for the Oculus Rift.



VISTICS PRE-ALPHA BUILD

PAX EAST 2014 VRMS



VIRTUAL RIFT MUSEUM SPACE

TECH

- Developed in Unreal Engine 4
- Visual Node Scripting and C++
- Designed for high performance desktop PCs
- Internal render runs at 150% over screens resolution
- 1080 x 1200 resolution per Eye*
- Stereoscopic 3D real time rendering at 90fps*

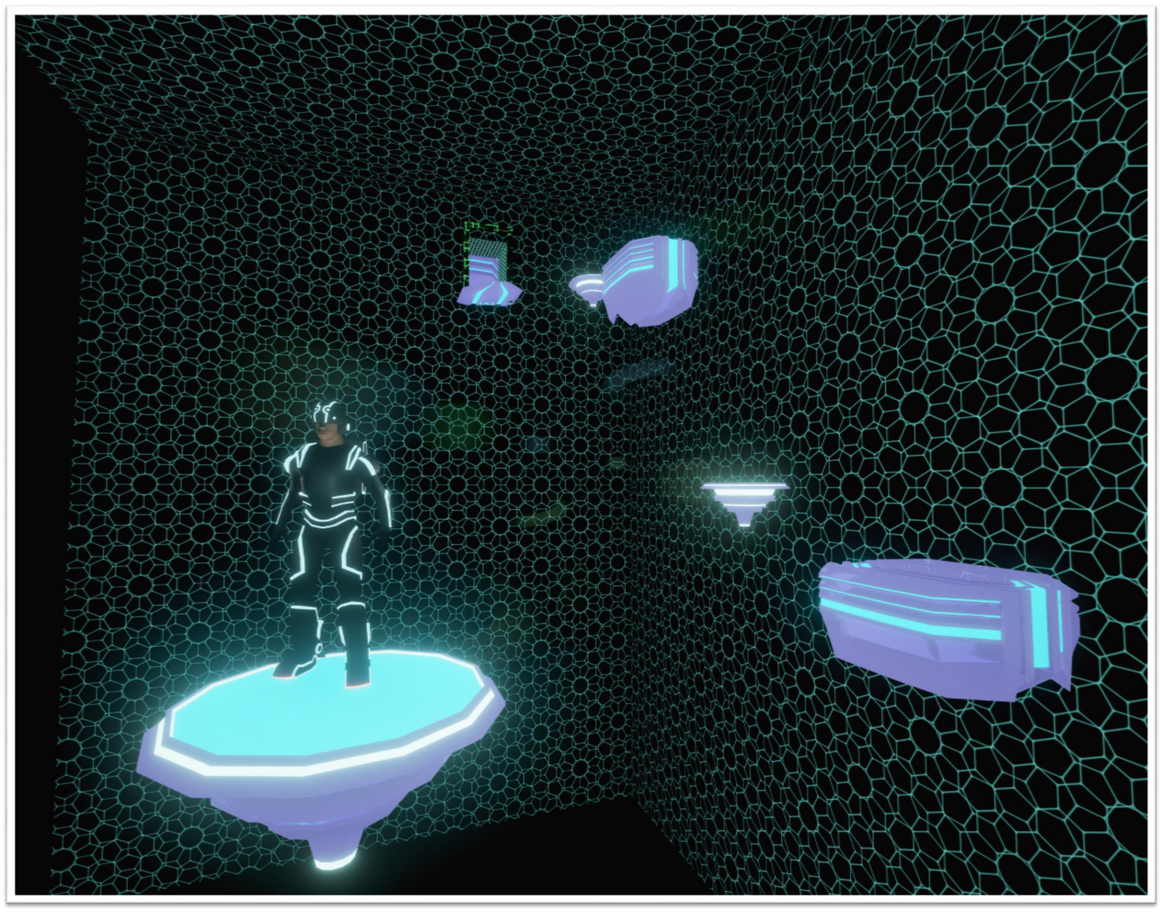
*Playable version is using the Oculus Rift Dev Kit 2 at 75fps at a resolution of 960×1080 per eye

DESIGN

- Expanded on past experience working on Virtual Rift Museum Space.
- Seated virtual reality experience
- Gameplay draws from classic 80s/90s platformers
- Visuals inspired by 80’s neon designs
- Oculus Rift allows players to look around the world

VISTICS TECH DEMO TESTING

PLAY TESTING



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CURRENT STATS

- 16 months of development
- 18 out of 20 levels in the game
- Oculus Rift CV1 supported
- Won “Best Technology” at GameACon in Atlantic City

VISTICS IS STILL IN ACTIVE DEVELOPMENT