

WHAT IS VIRTUAL REALITY (VR)?

Institute for the Integration of Technology into Teaching and Learning (IITTL)

UNT Discovery Park

3940 N. Elm Street, Suite G150

Denton, Texas 76207

What is Virtual Reality (VR)?

Virtual Reality (VR) is the use of computer technology to create a simulated environment. VR places the user inside an experience. Instead of viewing a screen in front of them, users are immersed and able to interact with 3D worlds. By simulating as many senses as possible, such as vision, hearing, touch, even smell, the computer/tablet/smartphone is transformed into a gatekeeper to this artificial world.



Google Daydream View



Oculus Rift



Sony PlayStation VR



Samsung Gear VR



HTC Vive

What is Virtual Reality (VR)?



- ▶ Some VR experiences also include other sensory stimulation like sound and tactile feedback of a touch



- ▶ The VR headset tracks head and eye movement/ motion of the user which allows the images display in the headset to change with viewer's perspective. If you turn to the right the images will render on that side.

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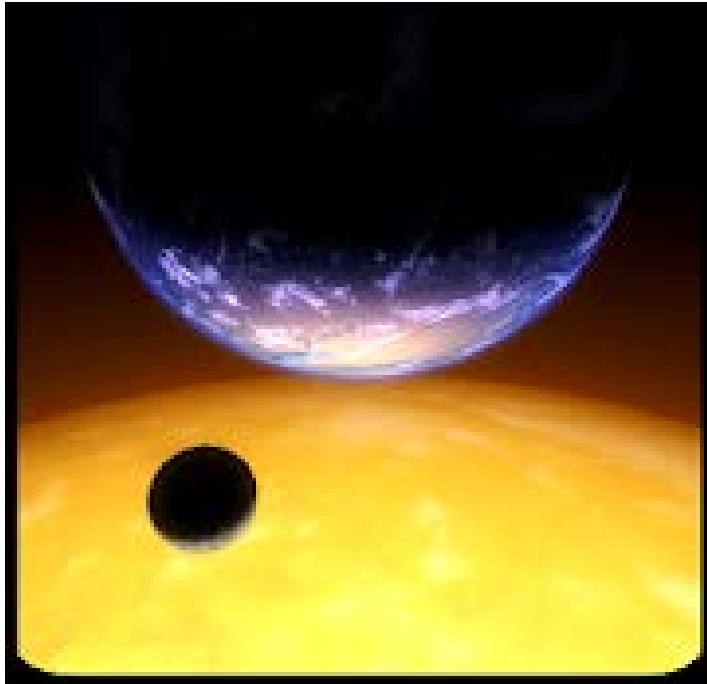


- ▶ The virtual interactivity allows one to freely move in the environment front, back and around unlike just watching a movie. This makes our brain think it's real but in virtual environment, thus a Virtual Reality!



- ▶ Virtual reality has lot of practical purposes other than just gaming and are using for training mechanics, pilots, astronauts, soldiers, and doctors.

Free VR App Resources for Space Science



Titans of Space VR

- ▶ NO WIFI NEEDED
- ▶ This is the app I used during the Saturday Sanger Camp
- ▶ Free
- ▶ Available on the Google Play Store for Android phones
- ▶ In-depth tour of our solar system and detailed voice-over with many fun facts about the various planets, stars and moons
- ▶ Self-paced (user controls speed by focusing sight on next button to move on)

Free VR App Resources for Space Science

Apollo 15 VR



- ▶ NO WIFI NEEDED
- ▶ Free
- ▶ Available on Google Play Store
- ▶ Simulates the 1971 Apollo 15 Moon Landing
- ▶ Allows student to walk on the Moon and drive a lunar rover

StarTracker VR



- ▶ NO WIFI but signal needed for GPS positioning
- ▶ Free
- ▶ Available on Google Play Store
- ▶ Overlays current star constellations over the sky
- ▶ Over 8000 stars shown and 88 constellations