Holographic computing in geophysics

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Types of virtual reality

Two main types

Immersive reality

Augmented reality
Hardware specifications

- 3 layers of glass
- CPU, GPU, and HPU
- 2GB RAM and 64GB onboard storage.
- Two speakers right above the ears
- Inertial measurement unit (accelerometer, gyroscope, and magnetometer).
- 4 microphones
- Ambient light sensor,
- 4 "environment sensing" cameras
- 1 depth sensing camera
- 2 MegaPixel HD camera
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Ongoing work

• Prof. William Hoff and Prof. Tyrone Vincent, 2000
  • Analyzing the accuracy of head pose in AR

• Joseph Capriotti (PhD student) and Prof. Yaoguo Li, 2014
  • Using Minecraft data format in geophysics

• Prof. Ed Nissen, Kendra Johnson and Lia Lajoie (PhD students), Current
  • High-resolution topography derived from aerial photographs captured by UAVs, kites and balloons to investigate earthquake recurrences
The future
The future
The future
We are thrilled to let you know that your application for the Microsoft HoloLens Development Edition has been approved.