Virtual, Augmented, Mixed Reality

...and *us*

Discussion Topics

» Terms and definitions

» State of technologies and current applications

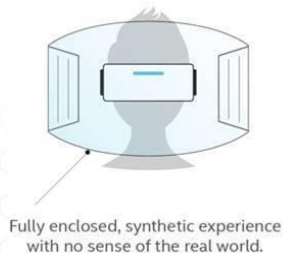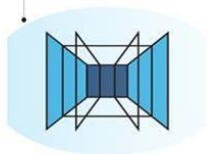» The direction we're headed

» Potential for the credentialing world

Level setting on terms

» AR vs VR vs Mixed/Merged Reality
  • No universally agreed-upon terminology ("xR" as catchall?)

VIRTUAL REALITY (VR)
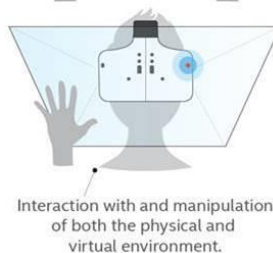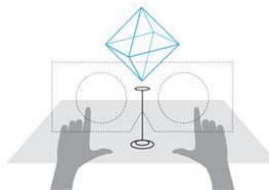Completely digital environment

Fully enclosed, synthetic experience with no sense of the real world.

AUGMENTED REALITY (AR)
Real world with digital information overlay

45°F

Real world remains central to the experience, enhanced by virtual details.

MERGED REALITY (MR)
Real and the virtual are intertwined

Interaction with and manipulation of both the physical and virtual environment.

Level setting on terms

» Viewed as a continuum

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VIRTUAL REALITY (VR)
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Current state of xR equipment
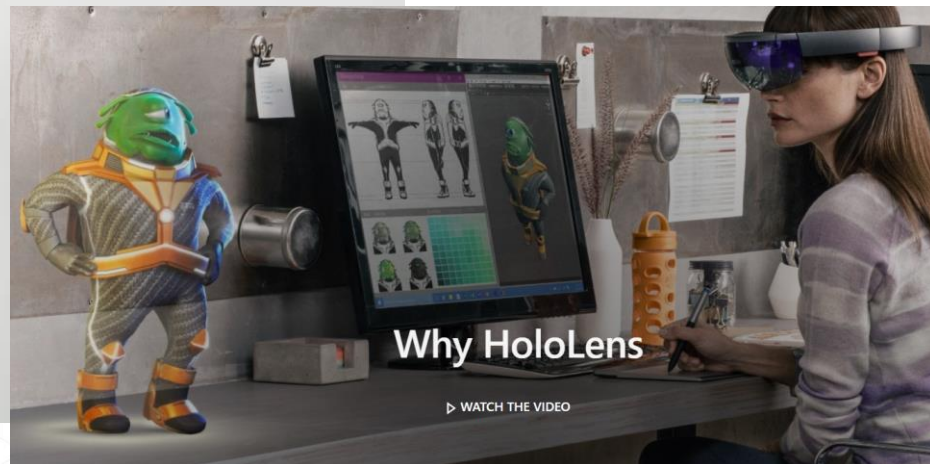
What this makes me think of

Current uses

- Examples of job applications
  - On-line meetings
  - Inventory tracking
  - Medical transcription
  - Architecture
  - Psychological disorder assessment
- Training/learning
  - Tasks requiring physical interaction that require different PoV
    - E.g.,
      - Installing helicopter rotor assemblies
  - Tasks requiring interpersonal interaction
    - Live actor-based role playing
  - Tasks requiring decision making
    - E.g.,
      - NFL QBs 3D video
      - Emergency service training
- Testing
  HR; recruitment

Will xR change our industry?

» New communication medium

- Has the potential to change *everything*, not just our industry

» Let your imagination run wild:

- Work
- Training
- Medicine
- Dating
- Sports
- Movies

A taste of what's to come

Consider…

So what can AR/VR/MR provide for us?

» Higher fidelity simulations

» "Safe" mechanism to observe actual job performance

» As a potential virtual delivery mechanism

» …?