Notes Nov 12 2018

How virtual reality works

Hardware – head mounted displays

Types of Virtual reality

* Non-immersive Virtual Reality – Desktop computers
  + Doesn’t alter your location or reality.
  + User is limited to what they see on their display monitors
* Semi-immersive virtual reality
  + Larger screens
  + No virtual reality gear needed
  + User is still aware of the real world outside of the virtual environment.
  + Examples:
    - Flight simulator: a flight
  + Immersive Virtual reality
    - Immersion into virtual reality is a perception of being physically present in a non-physical

Virtual Reality Play Area – Immersive

Virtual reality issues

* Privacy and data

Privacy and Data

* The more we merge into a virtual world, the more of ourselves we are likely to give away. This leads to greater privacy.
* Virtual reality providers use cloud-based technology.
* Oculus rift collects information: email, occupation, date of birth, place of residence.
* Collaboration is one of the most important virtual reality applications, but the potential security issues complicates it.

Psychological Effects & Torture/Virtual Crime

* Depersonalization – a psychopathological syndrome characterized by loss of identity of feelings of unreality and strangeness about one’s own behavior.
  + User

Applications of Virtual Reality

Medicine

* Psychotherapy
* Enhanced surgeries
* Treating Autism
* Mental Health

Education

* Lab demonstrations: allows students to see lab demonstrations when it is not safe to do in person or the materials are not present.
* Field Trips: allows students to virtually visit any location allowing the student to engage through

Training

* Flight simulations
* Driving simulations
* Maintenance training on heavy equipment
* Employee training

Discussion Questions

* At what point does virtual behavior constitute a real-world criminal act?
* What do you see as obstacles to virtual reality acceptance in more industries?