Tech Talk
TT966: Enhanced Virtual Reality with HTML5

Friday, January 27, 2012 11:00-11:45
Room 2011, Moscone West Hall

Dr. Bill Wiecking
Director, HPA Energy Lab
wiecking@mac.com

Students: Mariko Thorbecke, Phong Hoang, Zane Moran,
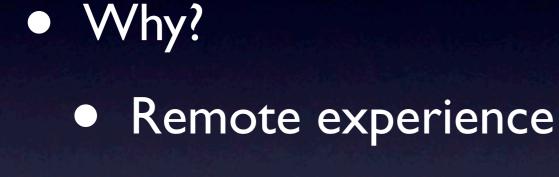Duncan Michael, Bo Bleckel

Virtual Reality 1.0

- 2-D digital images "stitched" together

- Two types:

  - Panoramic: vertical axis, looking out from a common center

  - Object: vertical axis, looking in towards a common center

- Can be linked together into "scenes"

Virtual Reality 1.0

- Process:

  - Hi res camera on tripod/rotating stand

  - Photos stitched using software (TourWeaver)

  - VRs linked to create scenes

Virtual Reality 1.0

- Why?

    - Remote experience

        - Museums

        - Physical plant (e.g. telescopes)

    - Access issues (altitude, , ADA, claustrophobia)

QuickTime VR

Virtual Reality 2.0: Enhanced VR

- Using HTML5 tags, hot spots can link live data, videos, controls

- Better "heads-up" awareness of complex systems

- Synthesis of data

- Examples:
  - [Keck Observatory](#)
  - [Art Gallery](#)
  - [HPA Energy Lab](#)

- Contact us:
  - Dr. Bill Wiecking, HPA <u>bill@hpa.edu</u>
  - <u>http://www.hpa.edu</u>