

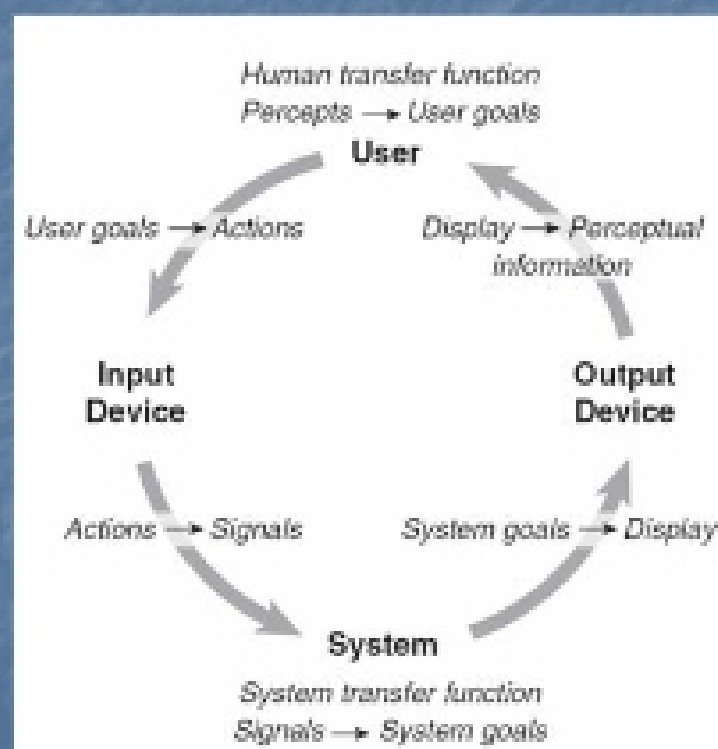
3D User Interface Hardware

Lecture #4: Visual Displays

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Interaction Workflow



Introduction To Displays

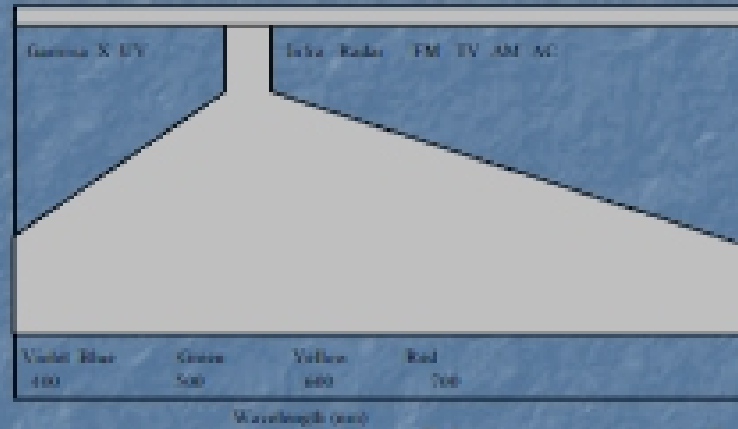
- *Display*: device which presents perceptual information
- Often 'display' used to mean 'visual display'
- Goal: display devices which accurately represent perceptions in simulated world

Lecture Outline

- Visual System
- Depth Cues
- Visual Display Characteristics
- Visual Display Examples
 - monitors
 - surround screen displays
 - workbenches
 - head mounted displays
 - arm-mounted displays
 - virtual retinal displays
 - autostereoscopic displays

Vision

- Stimulus: light of wavelengths ~350-750 nm



- Visual dominance: 50% of brain involved in processing!

Eye Physiology

- Camera metaphor:
 - lens (can change)
 - film (retina)
 - amount of exposure (pupil)

