CSE 190: Virtual Reality Technologies

LECTURE #4: STEREO VISION

VR Content Presentations

Tim Hedstrom: Google Cardboard App
- https://itunes.apple.com/us/app/google-cardboard/id987962261?mt=8

Taylor Durrer: Helvetia By Night 360
- https://vimeo.com/207528129

Christy Ye: Colgate Experiencia 360
- https://www.youtube.com/watch?v=12otR342ijc

Kavin Srithongkham: Zombie Shooter VR
- https://itunes.apple.com/gb/app/zombie-shooter-vr/id935707913?mt=8
- https://youtu.be/JYByhN0fil0?t=46s

Chen Liu: Horizons
- https://play.google.com/store/apps/details?id=com.reactify.HorizonsVR

Announcements

Homework project 1 is on line.

- Will be discussed at 3:30pm today in CSB 002

ArtPower competition

- Submission deadline April 14th, festival May 10th
- http://artpower.ucsd.edu/programs/student-new-media-festival/#competition

Unity programmer wanted for autism app for cell phone based VR.

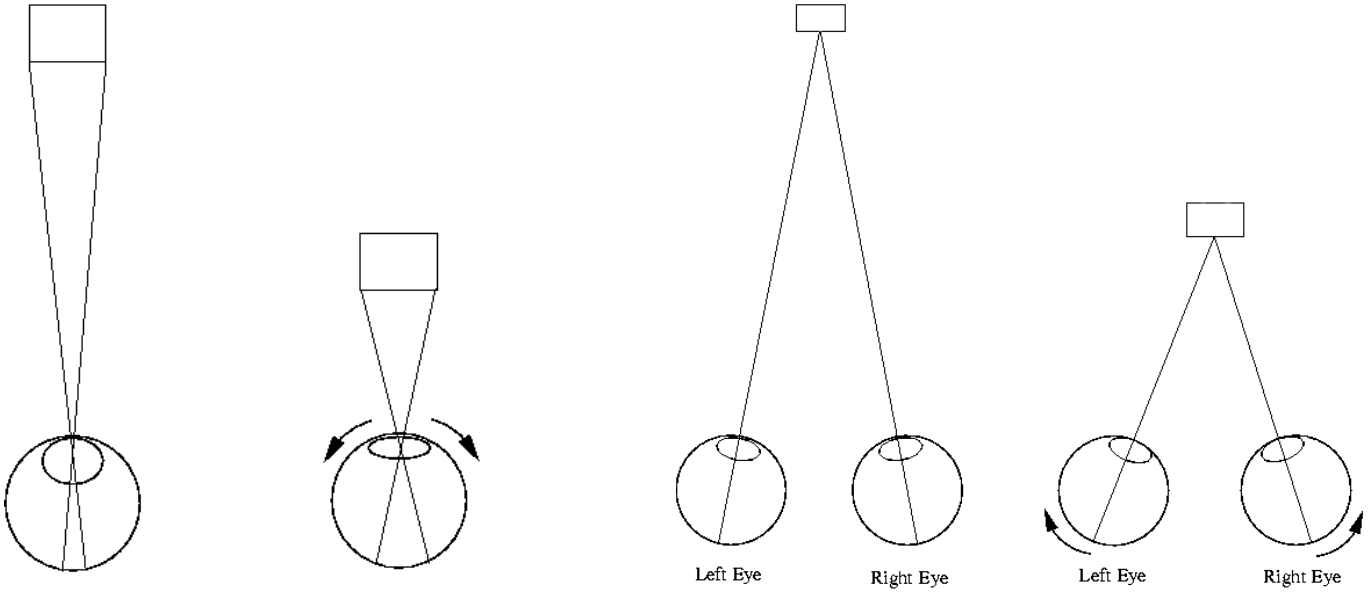
VR lab opening May 2nd 3pm

Stereo Vision

Convergence

Rotation of viewer's eyes so images can be fused together at varying distances

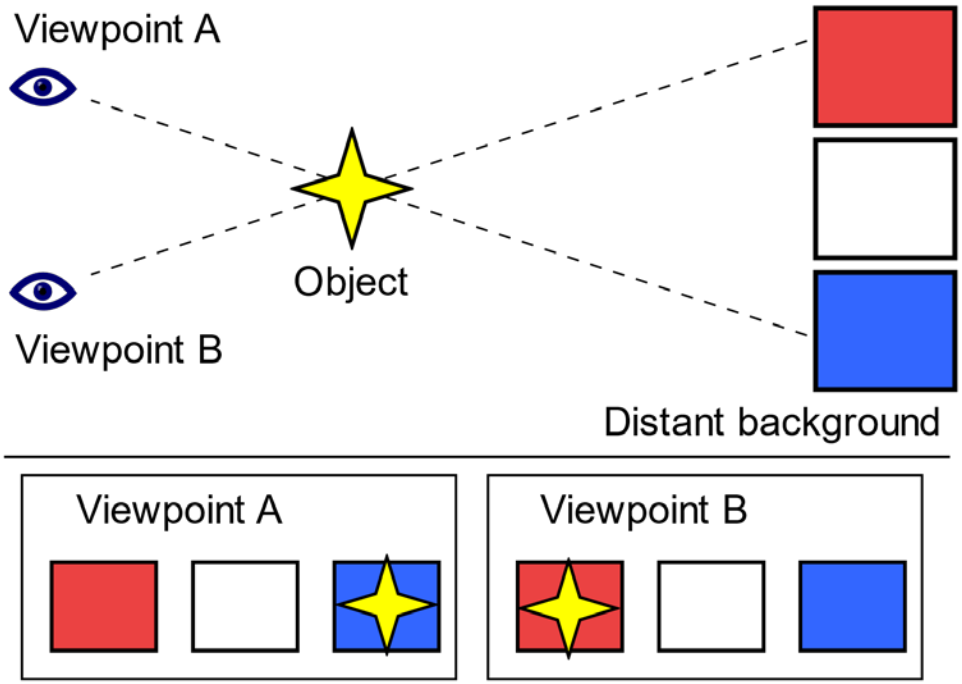
Do not confuse with accommodation!



Binocular Disparity and Stereopsis

Each eye gets a slightly different image.

Only effective within a few feet from viewer.



Accommodation-Convergence Mismatch

The vast majority of current VR systems confuse the brain with contradicting oculomotor cues.