

CSE 165: 3D User Interaction

Lecture 7:
Wayfinding - Cues

Announcements

- Sunday, January 31st at 11:59pm:
 - Late deadline for project 1
- Monday, February 1st at 4pm:
 - Discussion Project 2
- Sunday, February 7th at 11:59pm:
 - Homework project 2 due

3D UI Presentations

- Daniela Molina:
 - SAIL: Signing Avatars and Immersive Learning
- Manxin Zhang:
 - Hand tracking by Ultraleap
- Alex Pu:
 - Hand Physics Lab

Artificial Cues

- Maps
- Compasses
- Signs
- Reference objects
- Artificial landmarks
- Paths

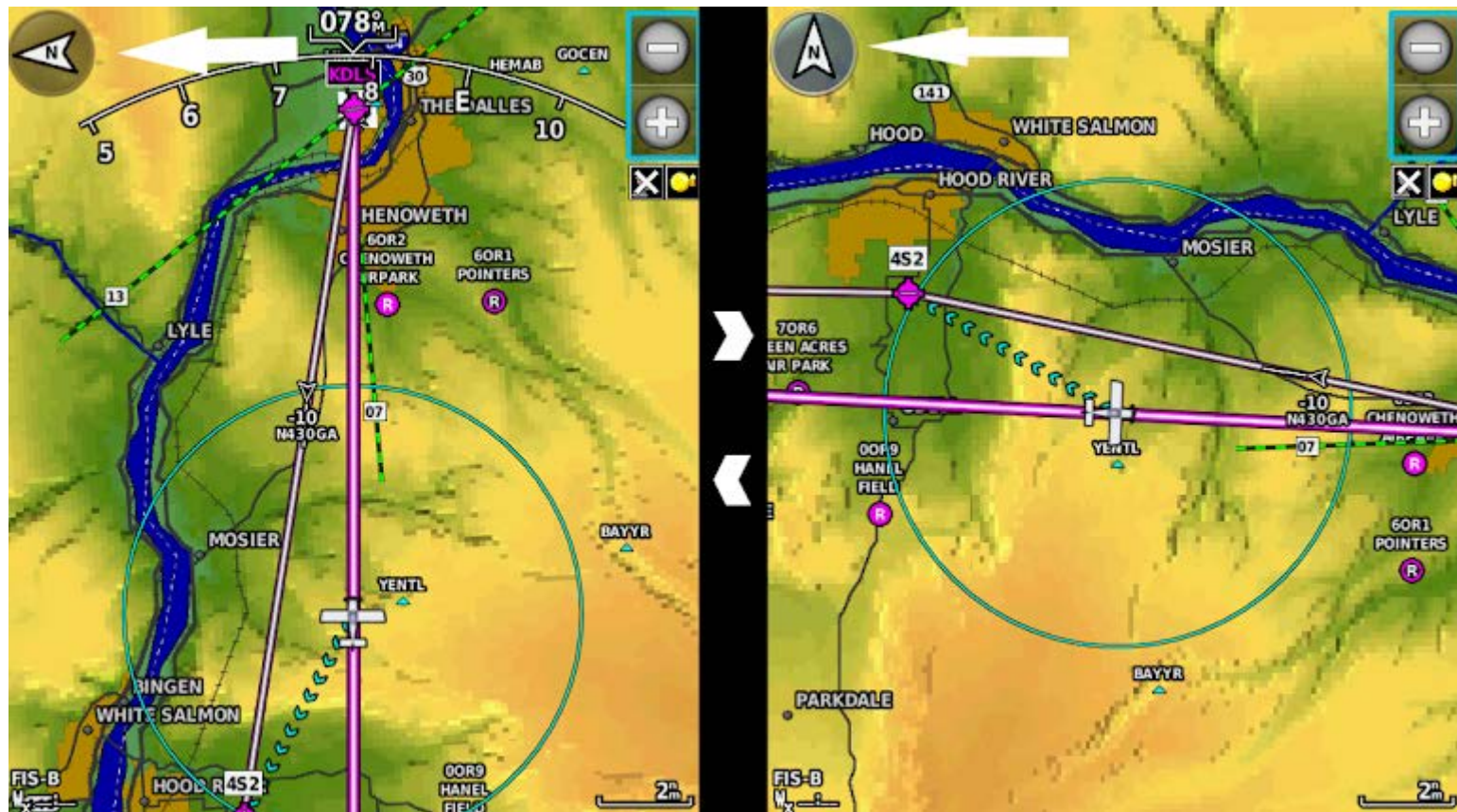
Maps



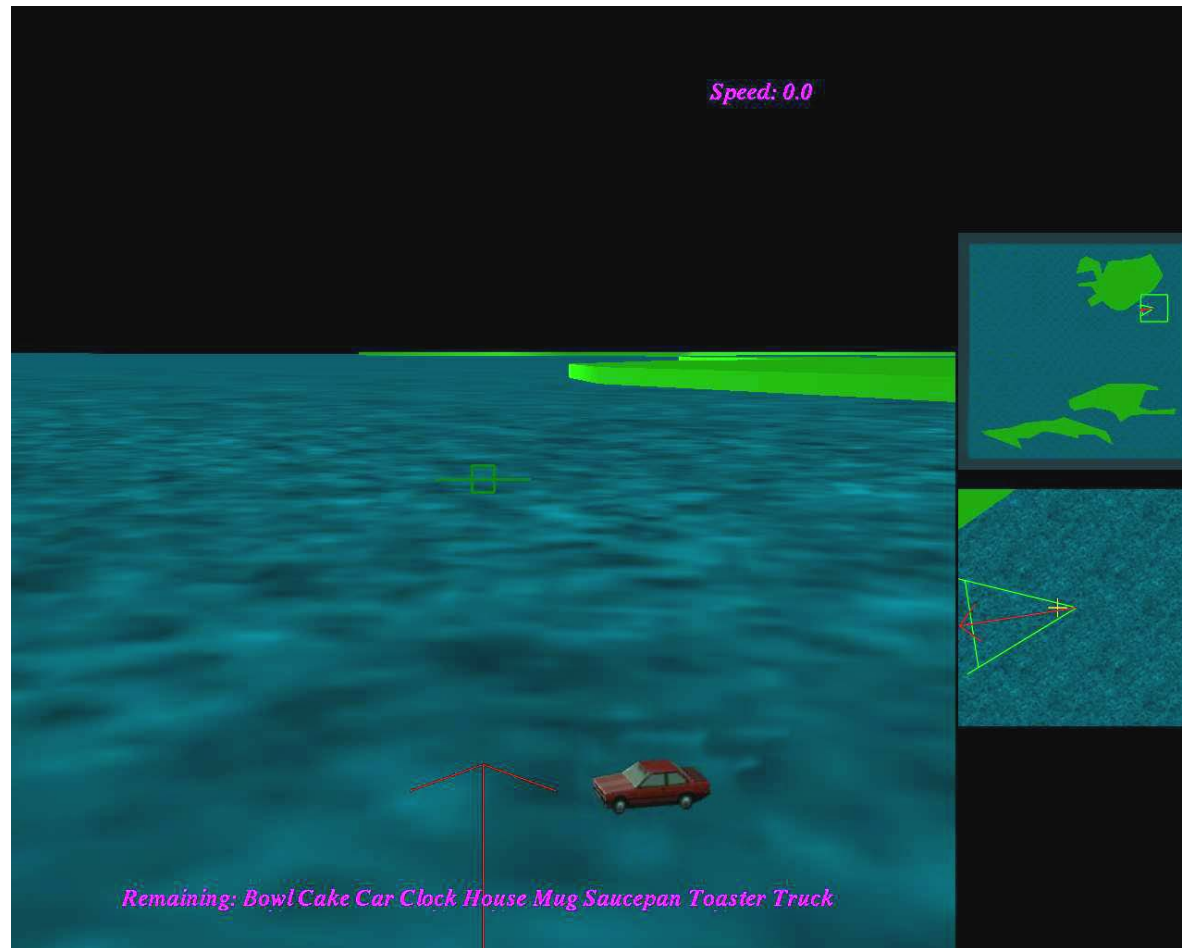
Parameters

- ◉ Location and size on screen
- ◉ Current location and destination
- ◉ Scale level: e.g., 1:1000
- ◉ Level of detail
 - ◉ Types of information: roads, buildings, moving objects, etc.
 - ◉ Map density
- ◉ Orientation (north up, forward up, 3D)
- ◉ Abstraction level
 - ◉ Stylized vs photorealistic

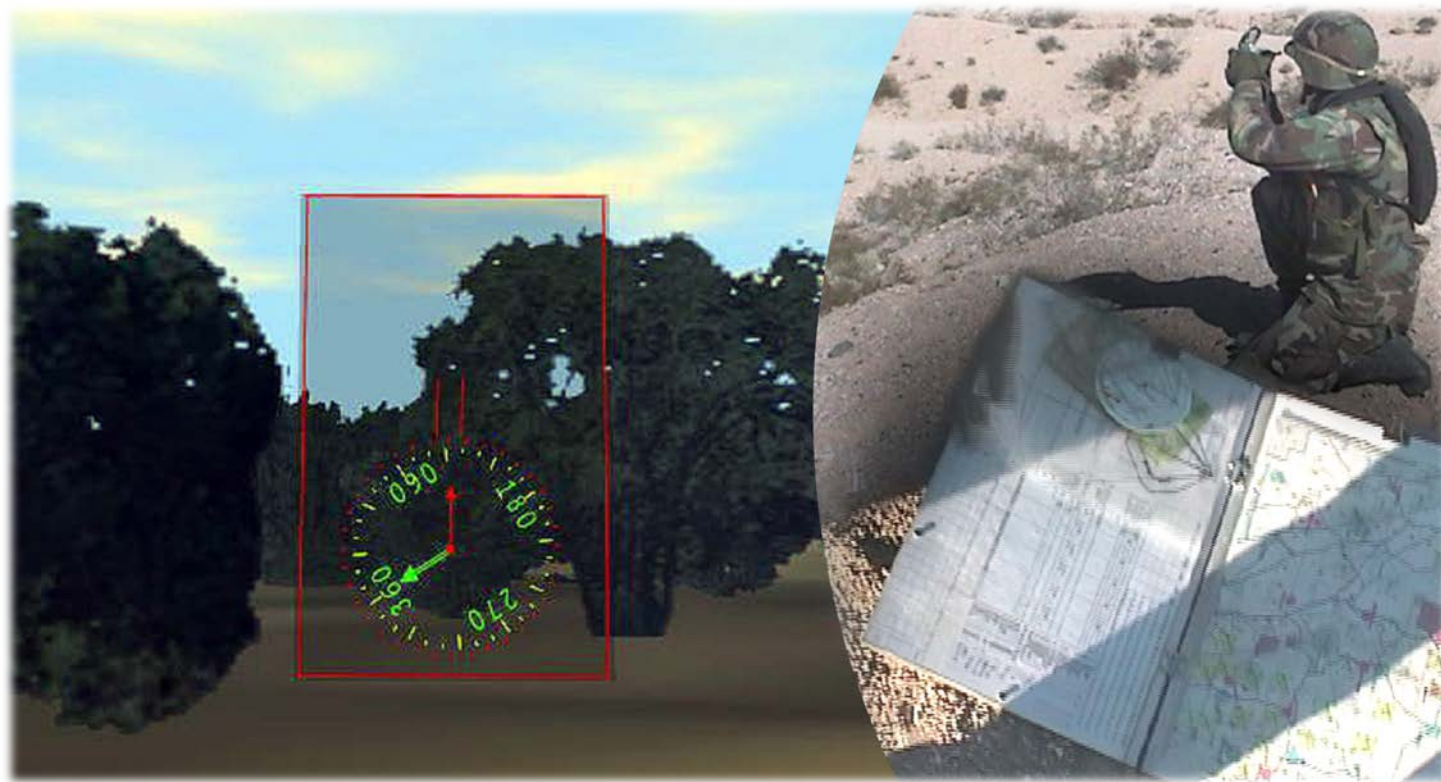
North Up vs. Forward Up



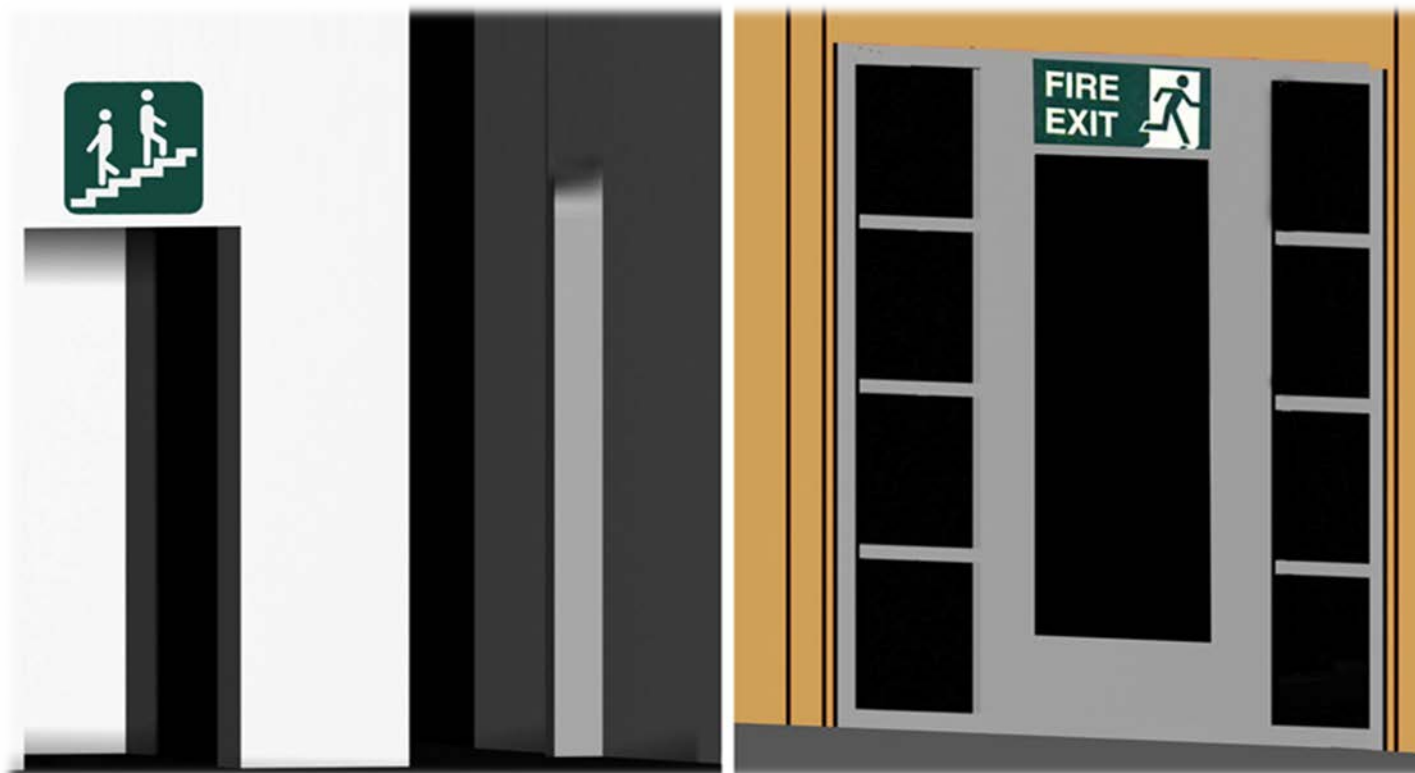
Example



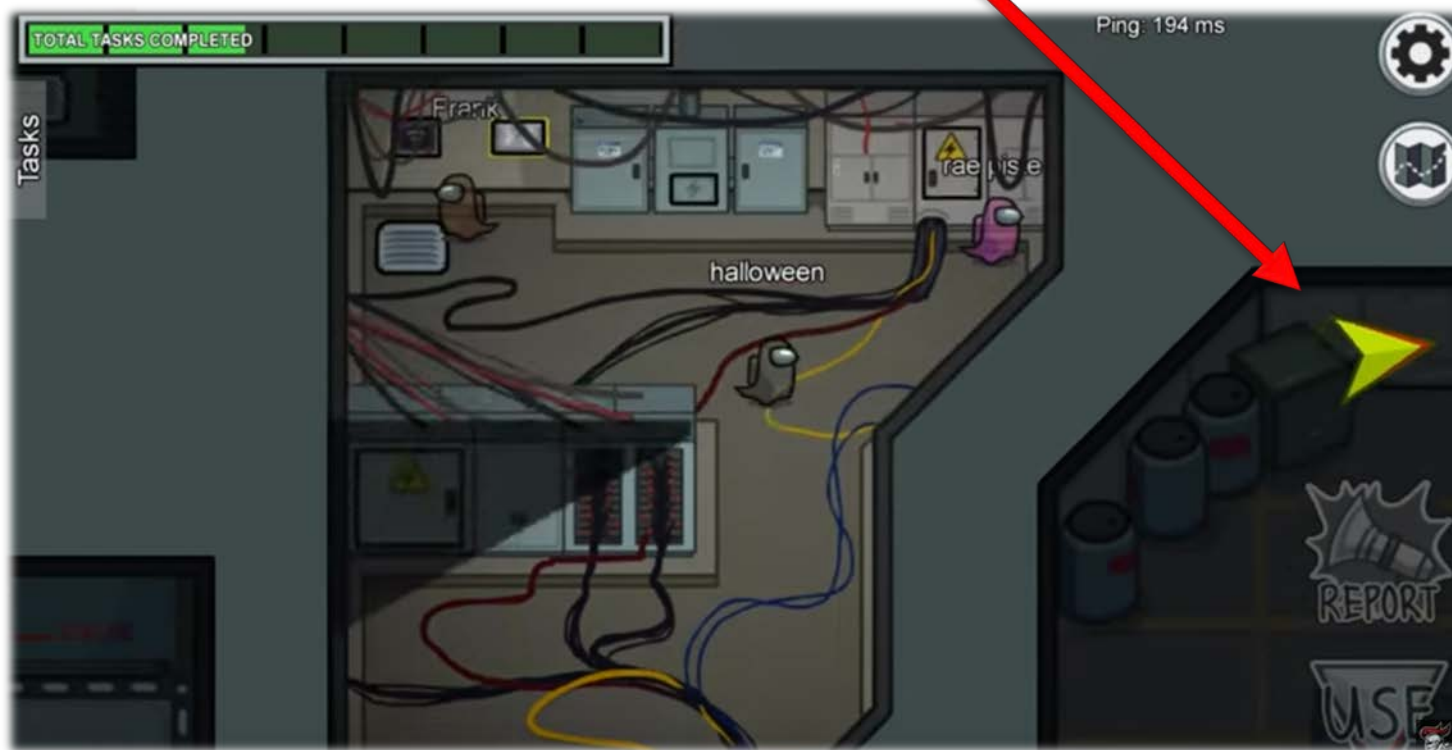
Compass



Signs

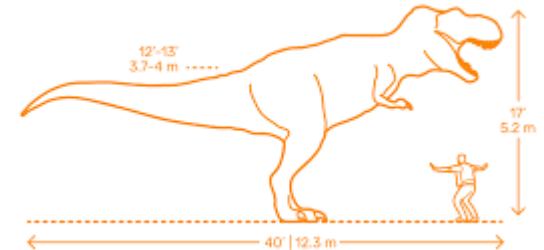


Dynamic Signs



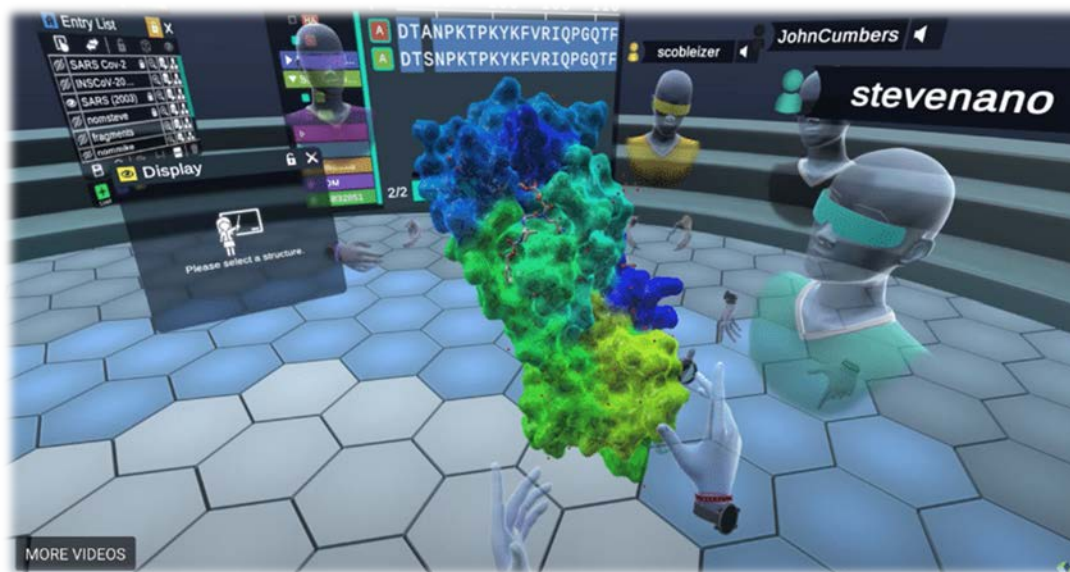
Reference Objects

- Objects that have well known size
 - chair, human figure, etc.
- Useful to estimate distances



Artificial Landmarks

- Local – help users in decision making processes
- Global – seen from any location



Path Visualization

- Display of continuous path to destination
- Useful in VR, but even more in AR

