

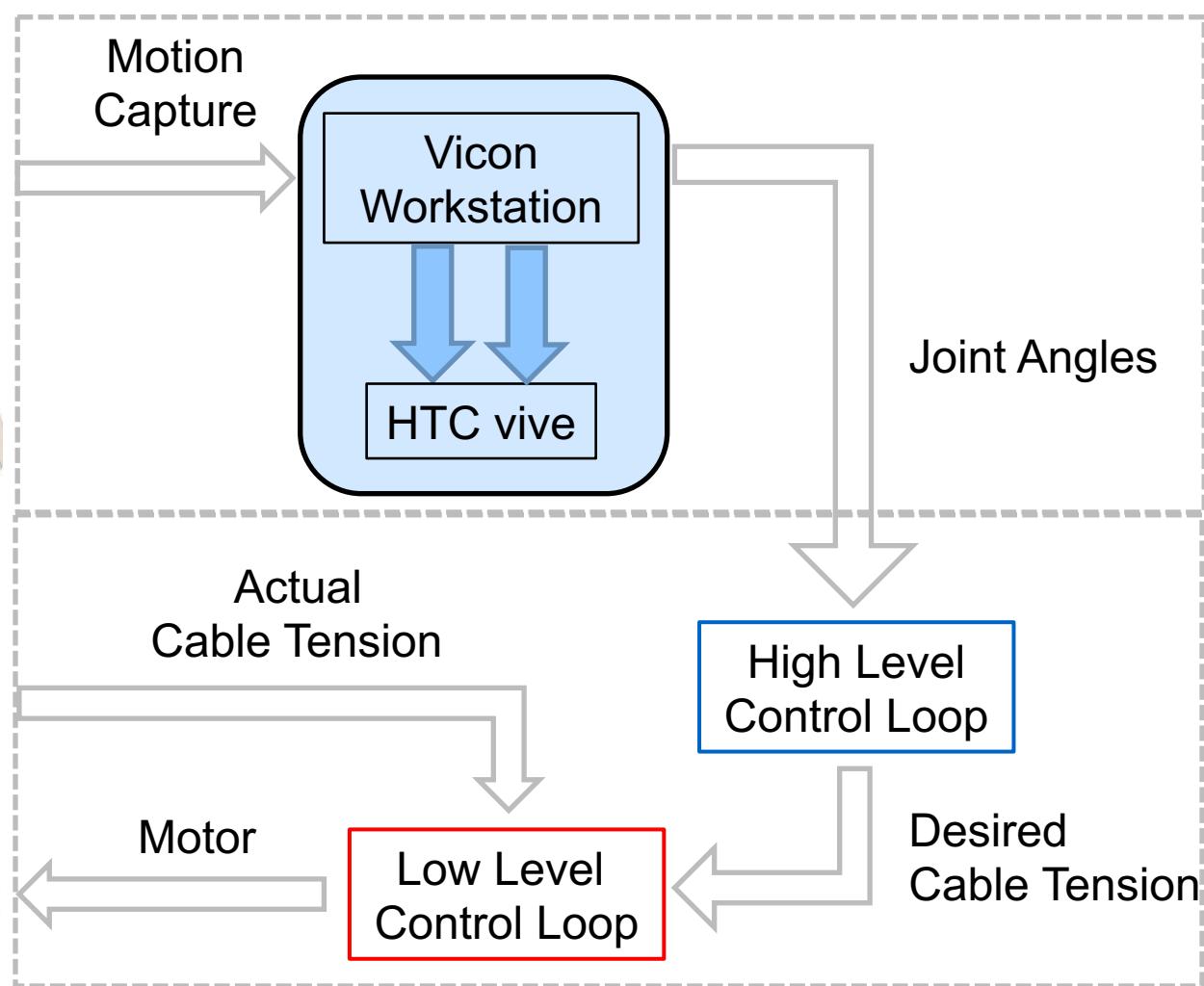
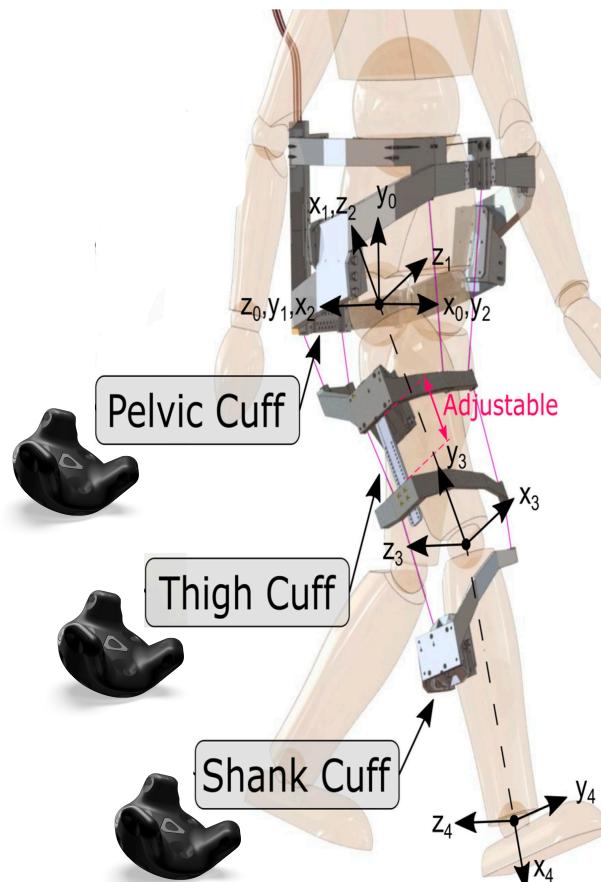
Motion Tracking using HTC vive

Yuanqing Hong

Mentor: Xin Jin



C-Alex



ADVANTAGE

Base Stations VS. Cameras

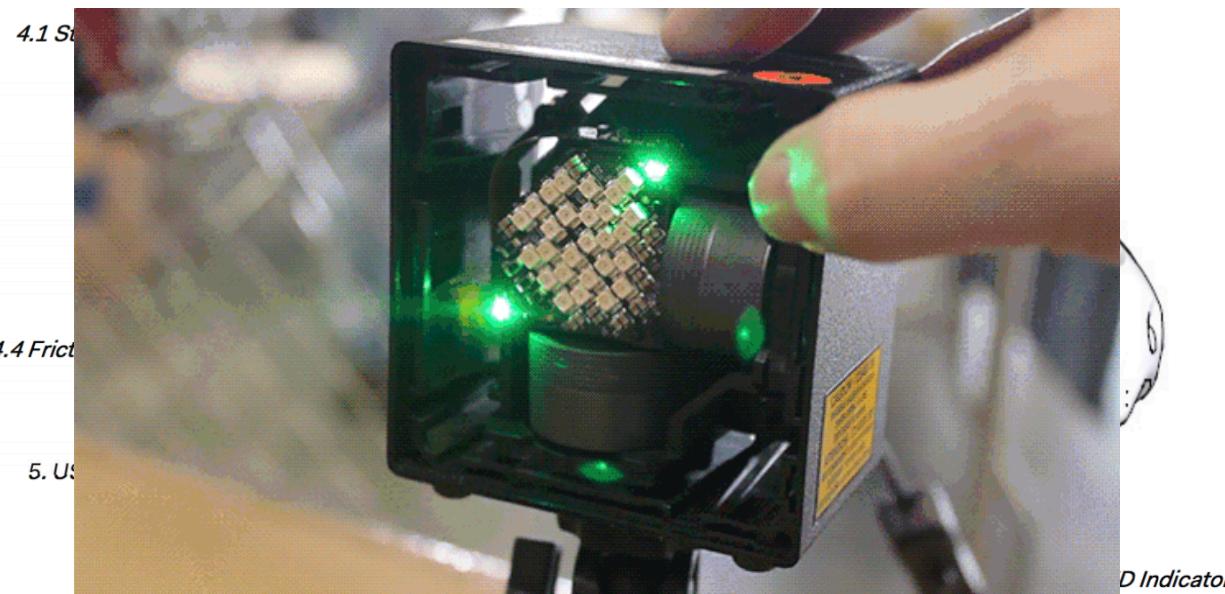


- **2 Lasers provide**
- **Absolute heading**
- **Frequency 120 Hz**

Trackers VS. Markers



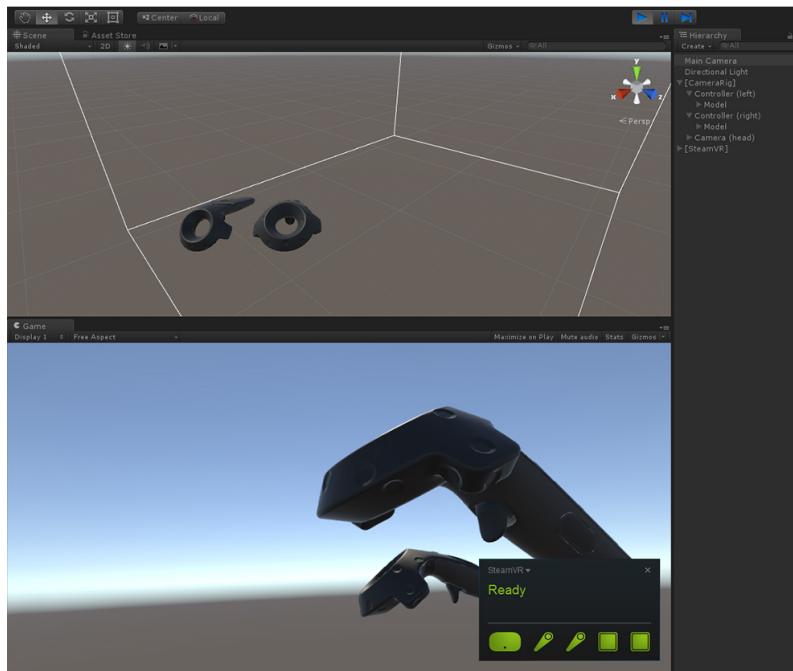
- **Gyroscope**
- **Accelerometer**
- **Frequency 250Hz**



- Steam VR platform



- Unity



Transform			
Position	X 0	Y 0	Z 0
Rotation	X 0	Y 0	Z 0
Scale	X 1	Y 1	Z 1



SteamVR Plugin
Scripting
Valve Corporation
★★★★★ (1728)
Free

- Experiment1:
 - Tracking accuracy
- Experiment2:
 - Integrate C-Alex & Tracker
 - Compare with Vicon
- Experiment3:
 - Using tracker's 3D position to calibrate cuff location

Time Line and Goals

