

Paraview Visualization Control via Leap Motion Controller

Presented by: Victor Geislinger
Cmps 261 – December 6, 2013

Background/Motivation

- American Sign Language (ASL)
- Interacting with 3D Space
 - Cumbersome with mouse
- Natural Interface



Background/Motivation

- Challenges to touchless technology
 - Accurate gesture recognition
 - Gesture vocabulary



KINECT™
for XBOX 360



Research

- Almost all dynamic actions
- “Actor” vs. “Commander”
- Pantomimed can be more intuitive



Method

- Collect Data via Leap Motion Controller
 - Focus on hand(s)/finger(s)
 - Real time capture



Limitations/Improvements

- Precision of Leap Motion
 - Limited by device
- Physical ability to detect movements
 - Rotation
- Transition lengths
- Output might have too many possibilities

Limitations/Improvements

- Selecting and moving individual data
- Confirming action
 - Pause
 - Gesture
- Plugin for Paraview
 - Leap Motion and mouse controls