Human Shell: Low-Cost, Localized Virtual Reality

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Idea:
Combine Kinect ($150) & Cardboard ($10)

1. Able to move your head.

2. Use hands to interact with objects in virtual space.

3. Control a 3D avatar in a multiplayer environment.
Goal:
Virtual multi-user sparring simulator
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1. No controls to learn.

2. Skills in game are translatable to real life.

3. Allows coordination over wide area.
Software Architecture

Unity -> KinectServer

Unity -> Processing

Processing -> [Diagram Component]
Demo
Extensions

1. Improve response time, performance.

2. Build avatar from a representation of person.

3. Use phone for haptic feedback.

4. Combine with work from CTC.
Timeline

1. 19 Feb: multiplayer/multi-Kinect working.

2. 26 Feb: game shell developed.

3. 4 Mar: integrate RGB data from Kinect into character.