

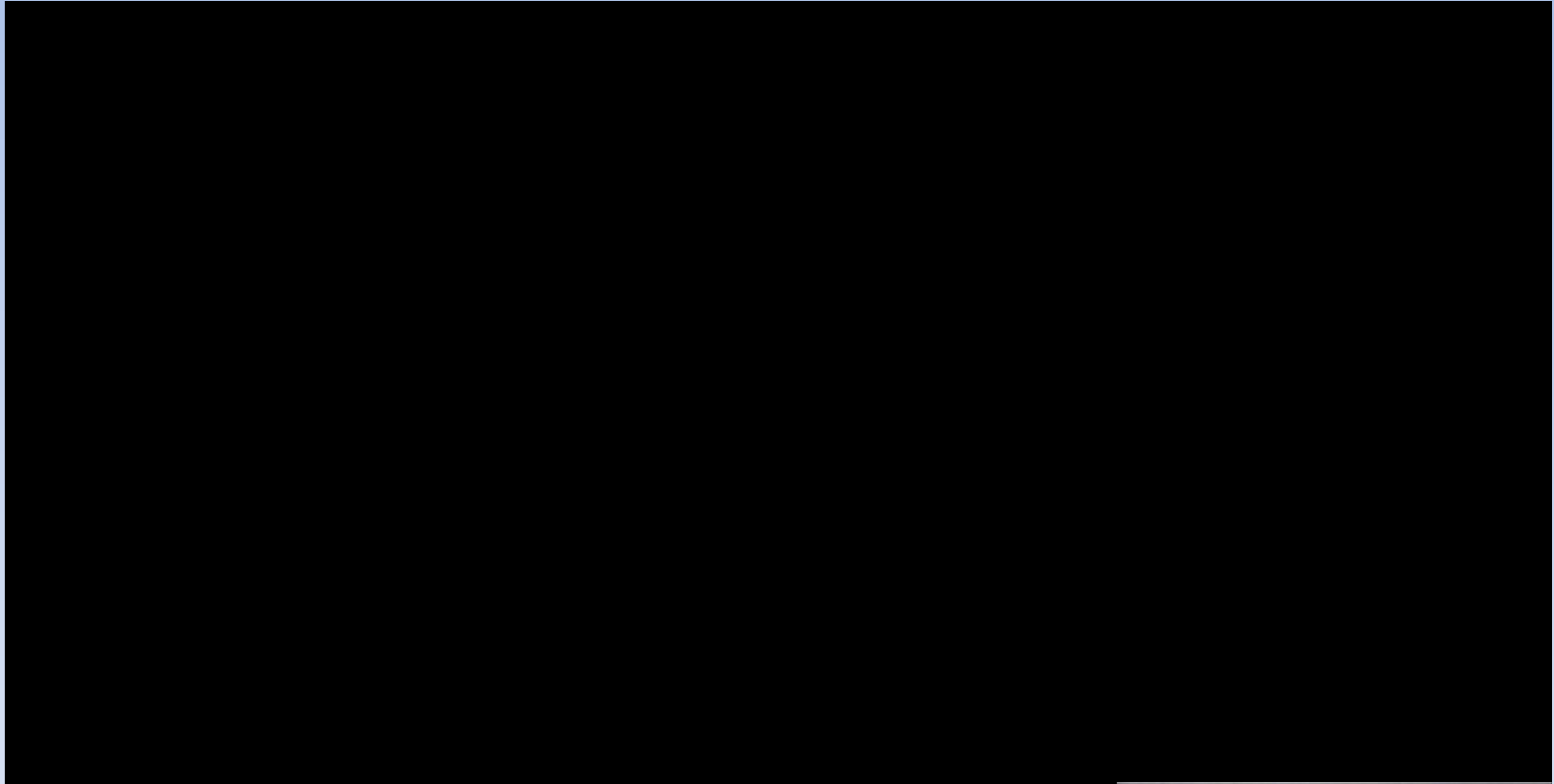
Body ownership of virtual avatars



An affordance approach of
telepresence

Tiago Coelho

Experimental task

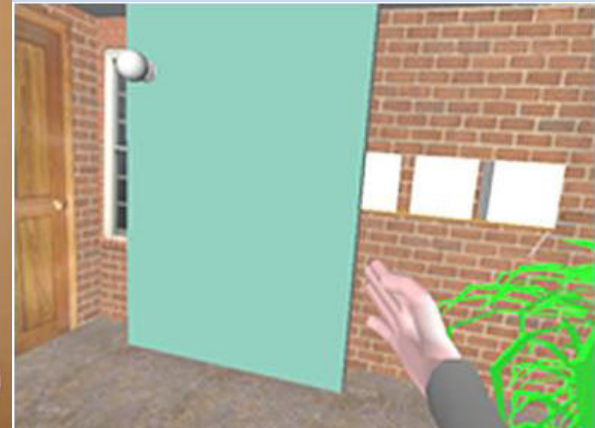


The project

- Avatar's morphology and movements
- Perspective of the avatar

Our approach

- Telepresence
 - The feeling of being present at a place other than the physical location of the individual.
- Ownership
 - Feeling of being something in the virtual world



How to evaluate?

- Questionnaires
- Physiological parameters (heart rate, GSR...)
- Behavioural assessment (perceptual-motor performance)

What behaviours?

- Affordance concept:
 - Action possibilities
 - Scaled to the organism
 - Some examples:
 - An object affords grasping if its shape and size are compatible with the organism's hand
 - An aperture affords passage if its width is larger than the organism's width

Technical description

- Interaction:
 - Kinect
- Modelling:
 - Avatars (Blender)
 - Environment (Unity 3D)
 - Programming language (Java)
- Experiments with participants – YOU (please)

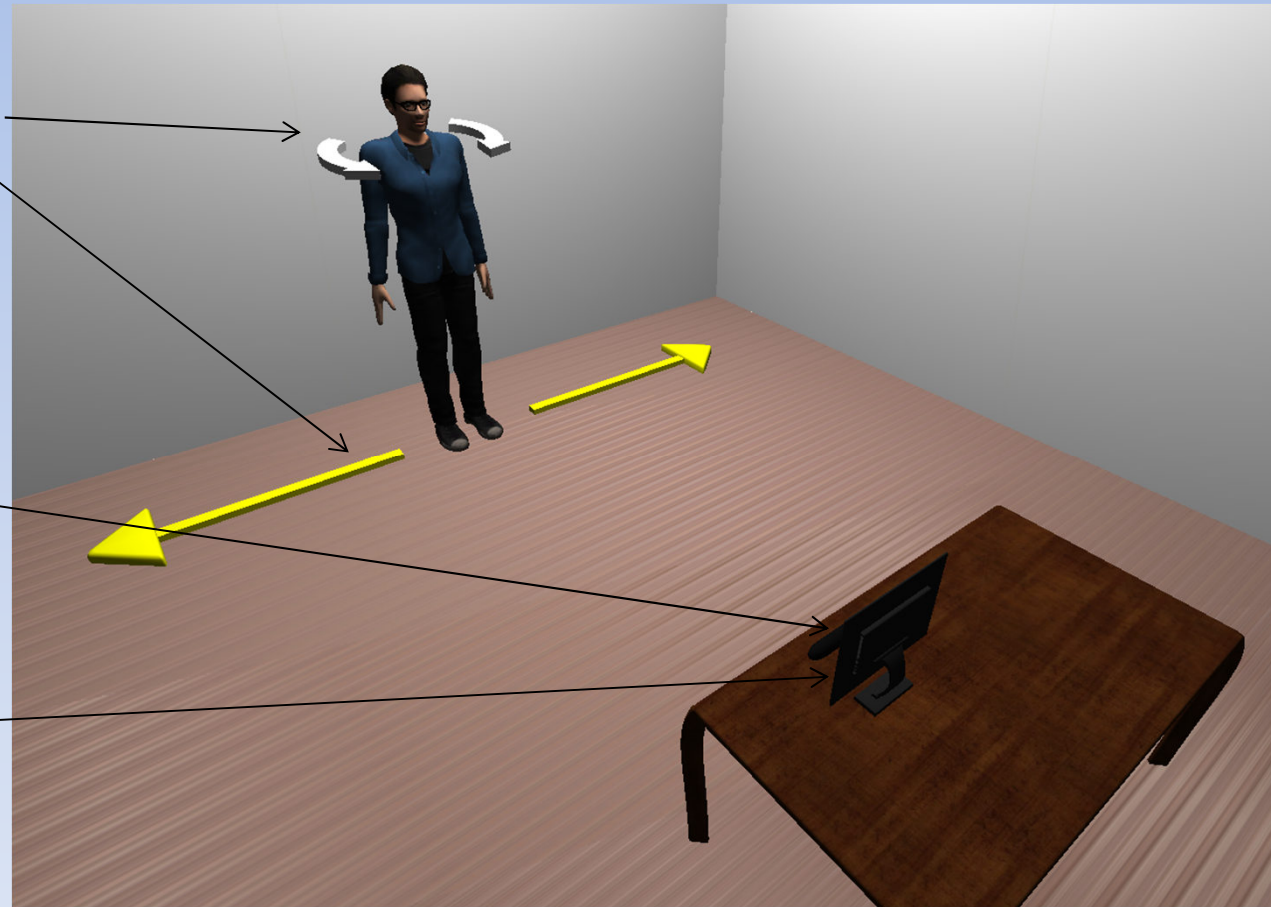
Experimental setup

Main movements:

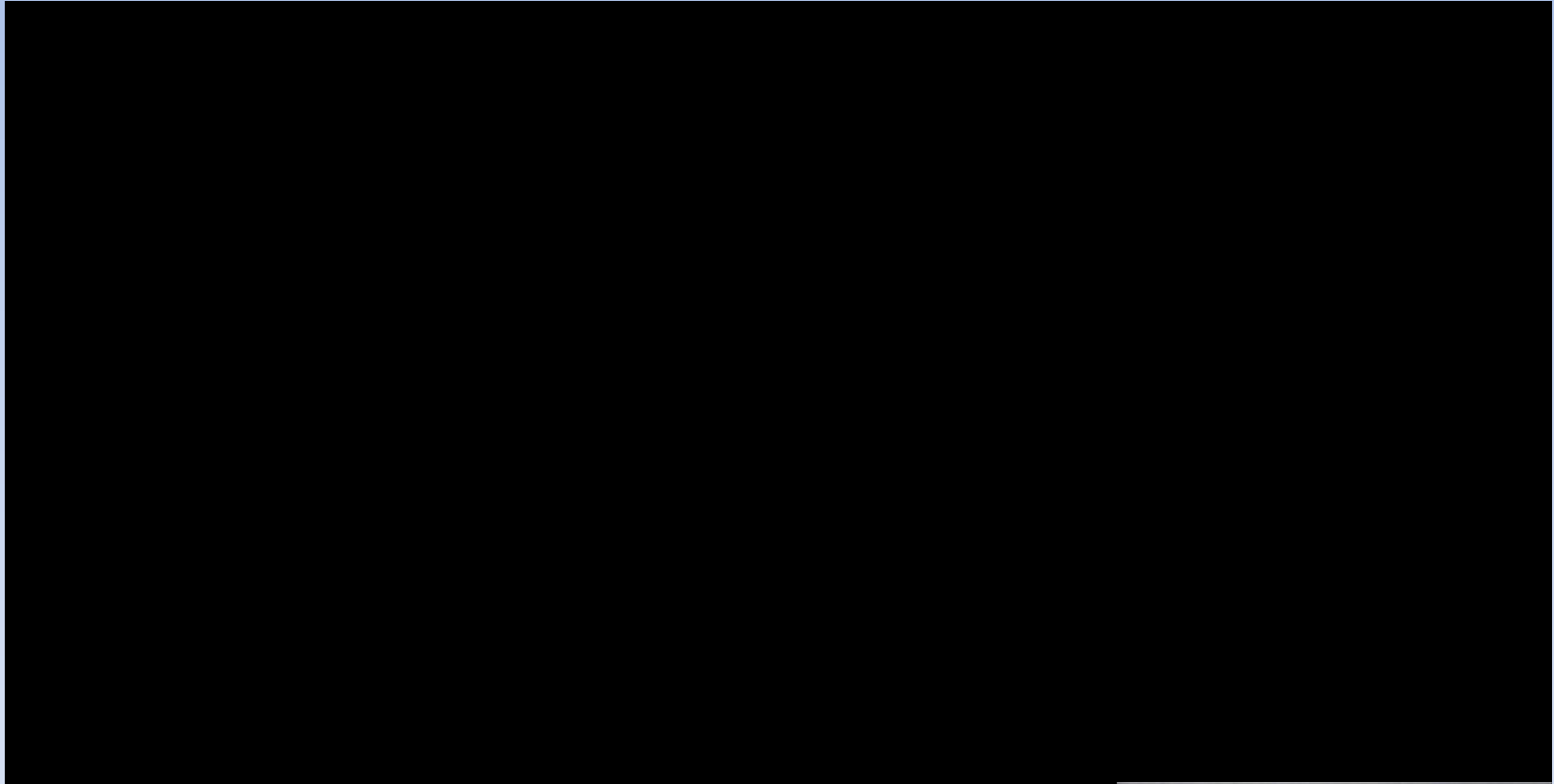
- Trunk rotations
- Lateral translations

Kinect sensor

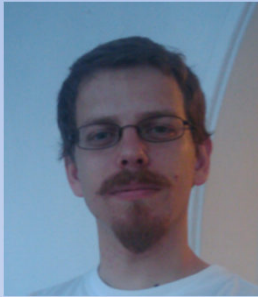
Display



Experimental task



Our team



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