Leap Walking

Gesture-Based Walking

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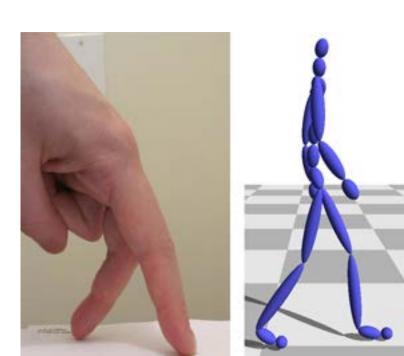
Motivation

- Can walking with fingers be mapped to a game character?
- "Kinect" for disabled people

Related Work

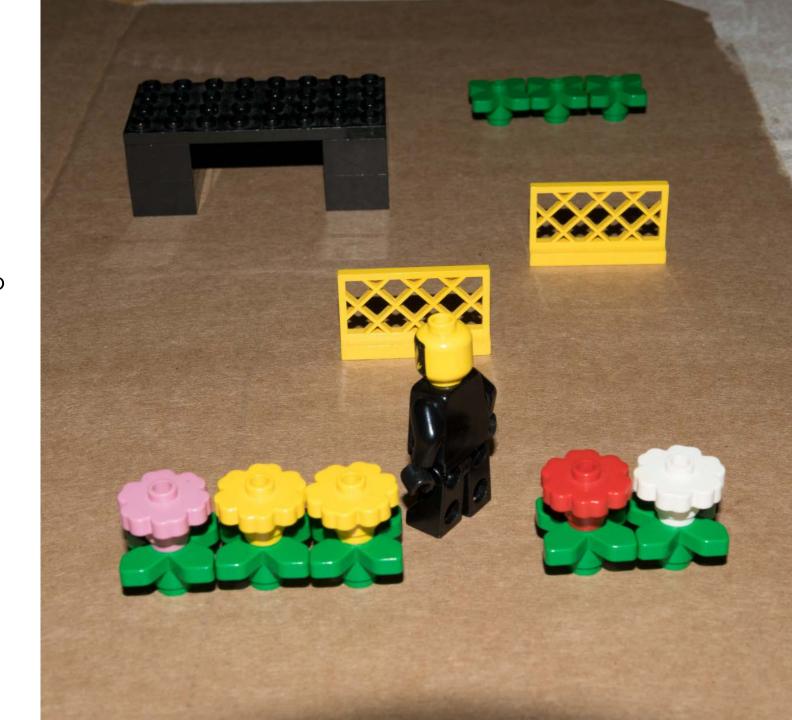
Noah Lockwood, Karan Singh (2012): Motion Editing with Contact Based Hand Performance

> They used Finger-Walking to animate a character



Concept

- Map the walking-gesture to the movement of a character
- Develop a jump'n'run-game to test the approach

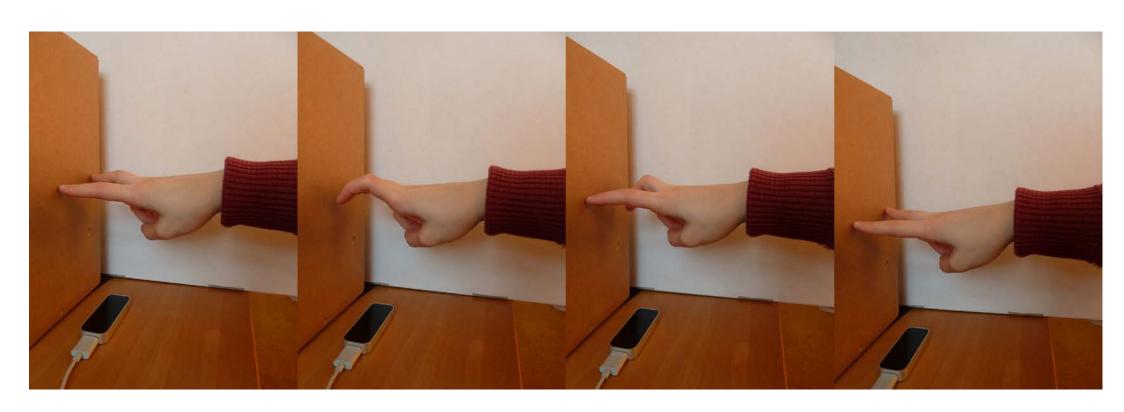


Setup

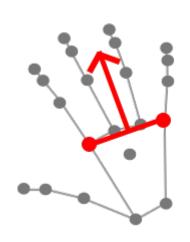
- LeapMotion tracks best horizontally
- Creating a Frame for the users orientation

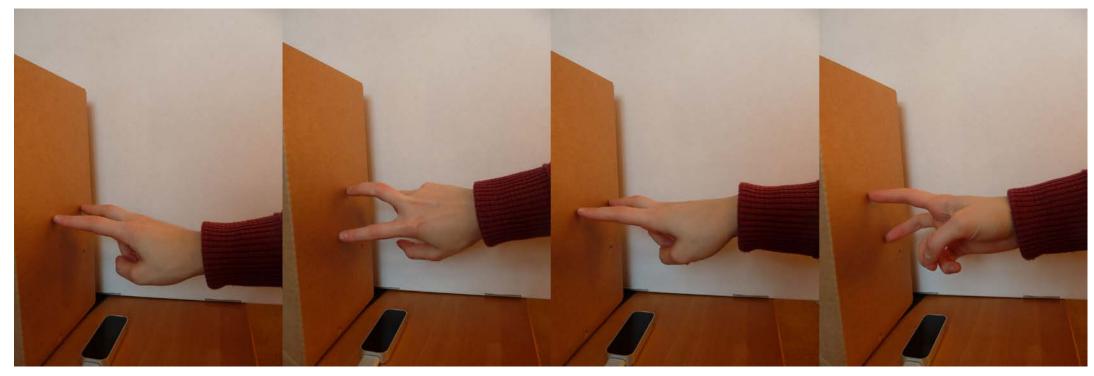


Walking

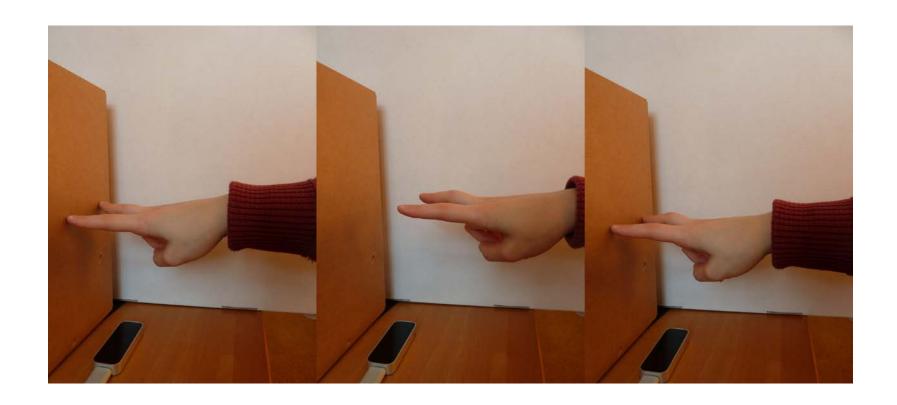


Walking Curves

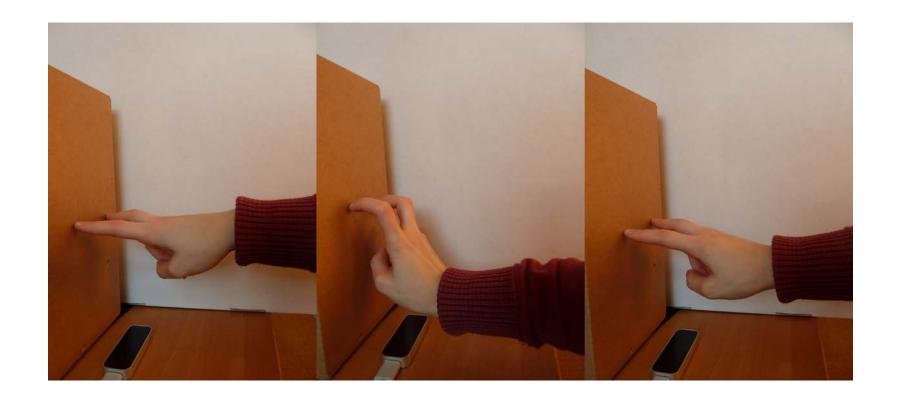




Jumping



Ducking



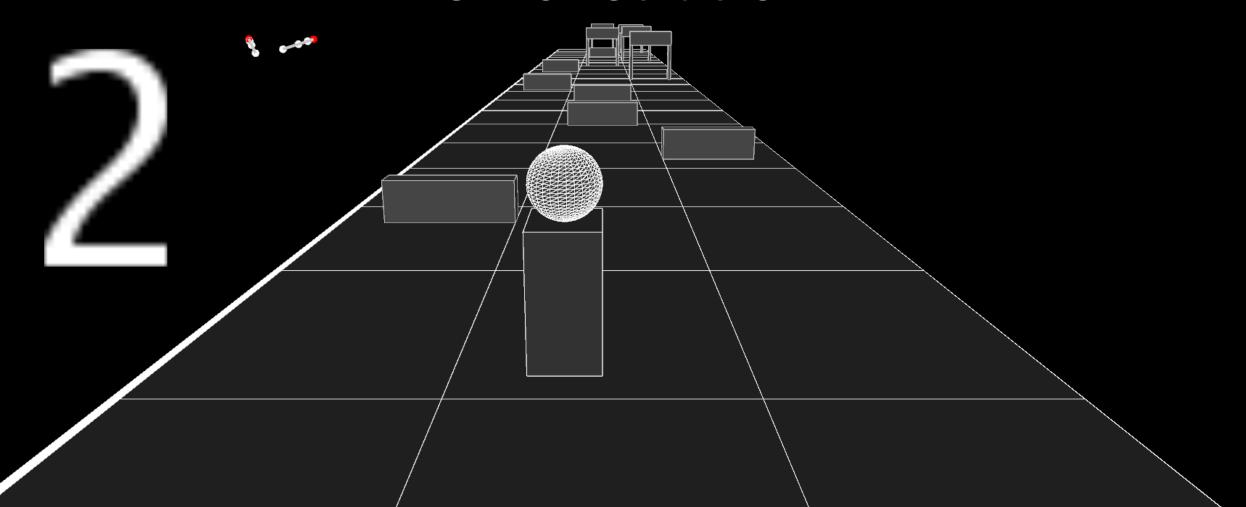
Technical Realization

- Leap Motion
- Processing (LeapMotionForProcessing by Darius Morawiec)
- Frame for the LeapMotion





Demonstration



Evaluation

- Difficult distinction between walking and non-walking gesture
- Walking is tiring for the hand

Future Work

- Are there other possibilities to map the hand to the body?
- Which other gestures can be used?
- Could the hand positioning be different?