She is NOT as Good as Him: Using Gender Swap in Virtual Reality for Increasing Empathy

CS567-Checkpoint 1

Faezeh Borhani

Outline

- Choosing the Tools
- Building the Avatar
- Learning Unity
- Implementation in Unity
- Reading Papers
- Future Steps

1. Choosing the Tools

Adobe Fuse vs MakeHuman

Features	Adobe Fuse Fs	MakeHuman
Ease of use & setup	High	High
Quality of support	High	Medium
Body customizing	High	High
Clothes	Less options	More options
Body rigs	Yes	Yes
Facial expressions	Morph rigs	Bone rigs
Recorded animations	Yes	Yes

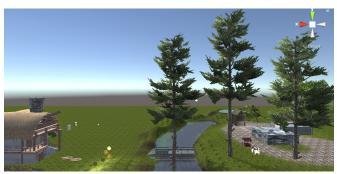
2. Building the character in Adobe Fuse



3. Learning Unity

Creating games





Coursera videos



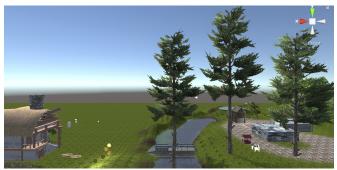
Building Interactive 3D Characters and Social VR

University of London Goldsmiths, University of London

3. Learning Unity

Creating games





Coursera

The uncanny valley theory

Backchannel

Gestures & postures

Facial expressions

Proxemics

The Psychology Behind Social Interaction

4. Implementation in Unity

• Importing the character from Adobe Fuse and fixing the bugs





- Creating body animations using a controller and recorded animations exported from Mixamo
- Creating facial expressions and lip syncing for the avatar using scripts

5. Papers

• Is it the real deal? Perception of virtual characters versus humans: an affective cognitive neuroscience perspective

Aline W.de Broset and Beatrice de Gelder

• FakeMi: A Fake Mirror System for Avatar Embodiment Studies

Marc Erich Latoschik, Jean-Luc Lugrin and Daniel Roth‡

Future Steps

- 1. Creating other required facial expressions
- 2. Fixing Hair problem
- 3. Designing the room
- 4. Creating more animations for the body
- 5. Reading more related papers
- 6. Creating the Wizard-of-Oz