PhD Open Days

Gaze-Touch: Exploring the effects of avatar representations and gaze-driven animations in differently-abled users' sense of presence and embodiment PhD in Computer Science and Engineering

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Opportunity

Technology The metaverse and VR are increasingly



Limited Mobility

Some users cannot resort to gestures or controllers



Exclusion

popular

Independent Variables

Avatar Representation

→ High-Poly

- → Low-Poly
- → Robotic
- → Iconic
- → Abstract → No Hand





Animation

 \rightarrow Real (2s)

This ultimately leads to limited VR experiences



 \rightarrow Dwell (1.5s) \rightarrow Fast (1s)



→ Snap(0.5)

Goals

Gaze-driven Animation

Avatar animations w/ predictive behaviour



Embodiment

Increase the embodiment and representation in VR



Dependent Variables

Embodiment

Agency, self-location & ownership



Presence

Presence in the virtual environment & self-

presence

Presence Increase the sense of presence in VR



Biometric Data

(Gaze)

Points-of-reg-ard, dwell times, saccades





Prof. Augusto Esteves

PhD in Computer Science and Engineering

