Revolutionising Virtual Embodiment with Avatars

Development of a mobile application for realistic face avatars

UNIVERSITY OF MANNHEIM
Business School

Team Project: Chair of Prof. Heinzl

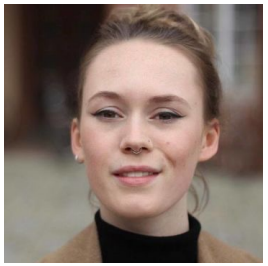
AACSB ACCREDITED · EFMD EQUIS ACCREDITED · ASSOCIATION OF MBAS ACCREDITED

Oversight of Team Project

Chair of General Management and Information Systems

UNIVERSITY OF MANNHEIM
Business School

Rosa Holtzwart



Prof. Dr. Armin Heinzl

Relevant Publications and Submissions in Human Computer Interaction:

Seeger, A. M., Pfeiffer, J., & Heinzl, A. (2017). When do we need a human? Anthropomorphic design and trustworthiness of conversational agents. Journal of the Association for Information Systems, 22(4), 931-967.

Seeger, A. M., & Heinzl, A. (2018). Human versus machine: Contingency factors of anthropomorphism as a trust-inducing design strategy for conversational agents. In *Information systems and neuroscience* (pp. 129-139). Springer, Cham.

Under Review: Holtzwart, R., Seeger, A. M., Heinzl, A..Beauty is in the Eye of the Controller: Designing Avatars for the Ideal or Actual Self.
Submitted at the International Conference for Information Systems 2022

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Realistic Personalised Self-Avatars

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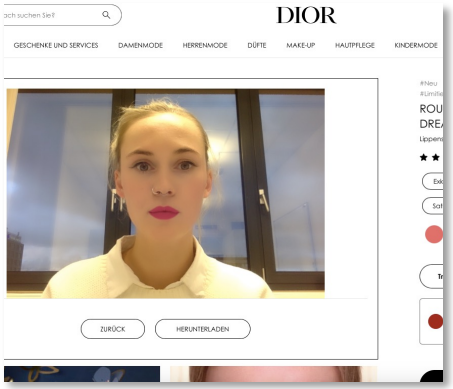
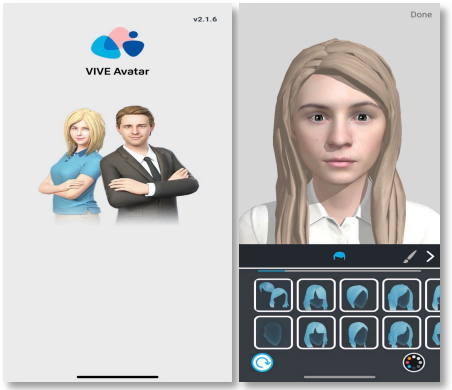
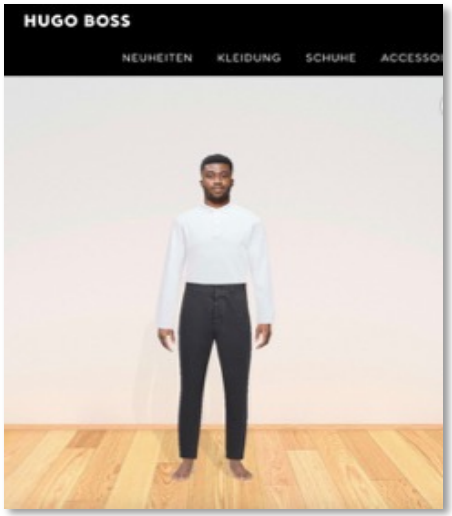
Companies are using avatars for extended reality applications

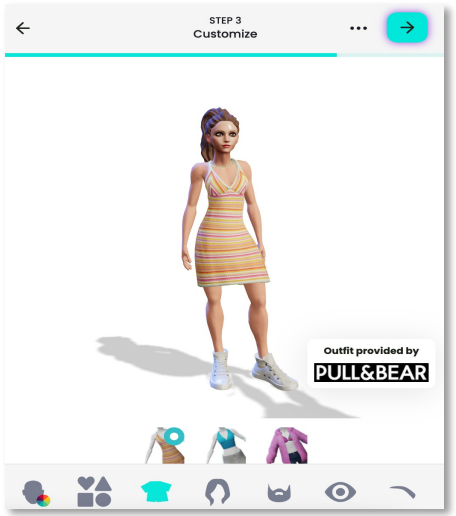
- Beauty (e.g. Dior)
- Men and Women‘s Fashion (e.g. Hugo Boss, Pull & Bear)
- Immersive Gaming (e.g. HTC Vive)

Design and realism of avatars influences shopping behaviour!









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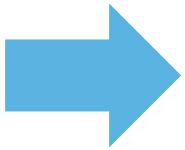
Goals of the Team Project

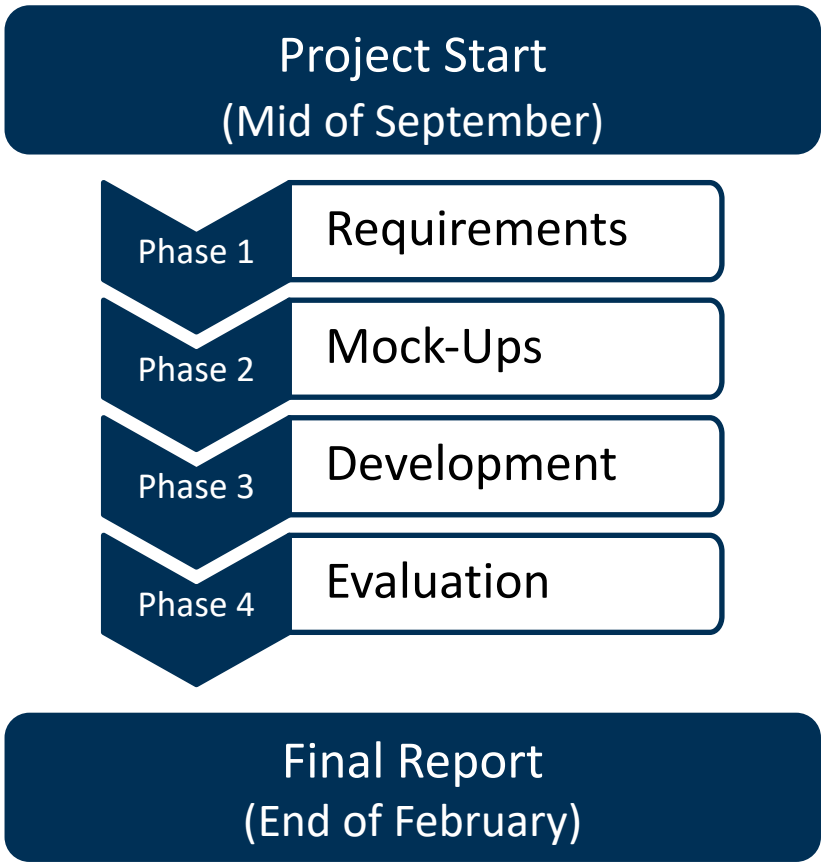
1. Development of a mobile application for the display of 3D facial avatars.
2. Development of an algorithm for the automatic extraction and transformation of image data into a 3D facial model.

Software Development Team



Application Front- and Backend

Project Phases, Milestones and Prerequisites

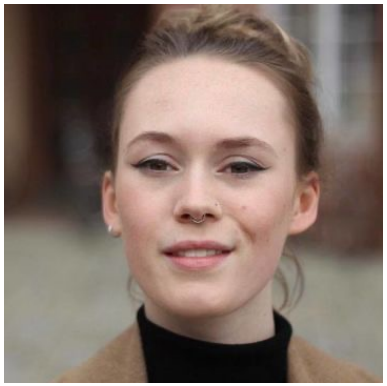


Prerequisites

- Extensive programming skills
- Experience with **either**:
  - mobile application development (e.g. Android (Java, Kotlin), iOS (Swift))
    OR
  - Visual/ image processing, facial feature extraction (e.g. Google Vision API, VGGFace2, CASIA-WebFace) and deep learning
  - Students with experience in both most welcome

Questions?

Rosa Holtzwart



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