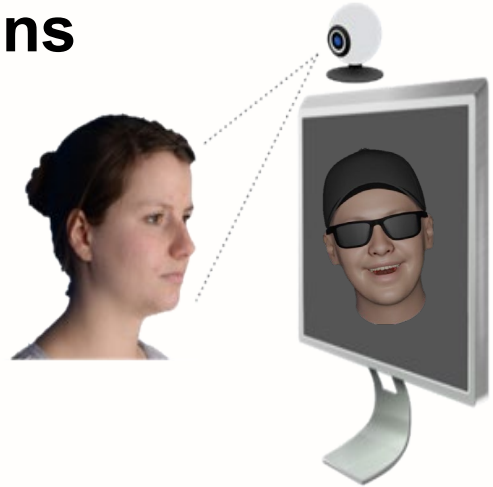


Bachelor-/Master-Theses (up to 3): Computer Science or Digital Media Computer Vision (CV) for Modeling Human-Avatar Interactions

Setting:

- We study how being “synchronized” with an avatar influences human facial responses to avatars.
- This work is part of an interdisciplinary DFG project (<https://www.uni-bremen.de/en/csl/projects/current-projects/ccsr>)



Tasks:

- CV-based machine learning (ML) to classify and analyze human responses to online avatars (e.g., using scikit-learn libraries and pre-processed features from OpenFace, MediaPipe)
- Testing and further development of our current Interactive Online Experimentation Platform (more emphasis on this point for students from Digital Media)
- Comparison of ML approaches to predict human behavior across different time phases (e.g., starting with regression models; more emphasis/depth for a MA-topic)

Requirements:

- Good programming skills (e.g., Python, optional Unity)
- Interest in VR and Computer Vision (e.g., OpenCV, OpenFace, OpenPose)
- Basic knowledge in ML (more emphasis for a Computer Science topic)
- Basic knowledge in pipeline development (more emphasis for Digital Media)
- High motivation, creativity, and reliability

When:

- As soon as possible!

Other:

- The focus of these BA/MA theses is flexible depending on which of the above tasks are most interesting to you!

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