

Assignment 8: Replicating Interaction Techniques (20P)

Hand in in groups of two.

Goals

You understand how complex interaction techniques can be implemented. You can implement interaction techniques based on their description in a scientific paper and supplementary material.

1 Documentation

4P

Search for scientific papers that describe the concept and/or implementation of new interaction techniques. Demonstration and short paper tracks of conferences such as UIST, EICS, MobileHCI, and CHI might be a good starting point. You can also use projects that were discussed in our journal club. First, collect papers you find interesting. Then, exclude everything that is not possible to be implemented within two weeks, for example because of hardware requirements, or because you would have to gather a lot of training data first. However, feel free to build upon existing code and/or training data. Then, decide which prototype you want to implement and/or extend.

Document decision process, implementation, and usage of your prototype.

2 Implementation

16P

Implement or extend the interaction technique described in the paper. You do not have to build a feature-complete copy, but the general interaction should be similar. If you decide to extend an existing project, your addition should be focused on interaction.

If you are unsure about the project's scope or need access to specific hardware, feel free to ask.

Estimate about 30 hours of work per group member for the whole assignment.