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# Player Assessment in Games

BA & MA Thesis Topic Areas

## Integration of Self-Reported Data Collection in Games

Research in human-computer interaction often requires the acquisition of self-reported data. An easy way of collecting data consists of questionnaires. In a first study we found that questionnaires that are integrated in game environments might be better than questionnaires in pen-and-paper or electronic form. Theses in this area aim to advance this concept.

How can different questionnaire elements be integrated in games? Is there a general concept of mapping questionnaire elements? Is the accuracy of the measurement equal to other forms of questionnaires?

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## Game Events

During game play a lot of events happen in-game, e.g. the player completes a level. Therefore, games provide a quite unique source of valuable information. The theses in this topic should investigate how to exploit this source of information for the assessment of player characteristics and state, and thus the adaptivity of games.

How are game events defined? How can game events be used to assess player characteristics (e.g. demographics) player state (e.g. emotion)? Can players be identified by game events? How should game events be integrated in a framework for player assessment?

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## Avatars in Games

Avatars serve many different functions in games, e.g. as representations of the player, as non-player characters or as a feedback mechanism in Serious Games. Theses in this topic area concern questions on how to use avatars for player assessment.

What data can be collected through assessment that is hidden in dialogues with non-player characters? Is it possible to assess characteristics of players from their designed in-game avatars?

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## Games in Virtual Reality

Virtual Reality is finding its way in the consumer market at the end of 2015 with the market start of the new VR HMDs (e.g. Oculus Rift CV1 and HTC Vive). A major selling point might be games in VR. However, there is little research on this topic. Theses in this topic area therefore aim on investigating the challenges and opportunities that stem from the application of this new technology to games.

How does VR affect the way games are designed? How can the new hardware be used to assess player state and characteristics? What benefits do Serious Games have from VR technology?

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