Recognizing Player States Based on Eye Movements

Open Bachelor/Master Thesis

Background

Pupil dilation and eye movements are important indicators for different cognitive and affective states of a user. Further, the eye has successfully been used for recognizing different user activities (e.g. reading, writing, walking etc.) and even for the recognition of environmental influences (e.g. indoor/outdoor activity, social settings). Additionally, online platforms, such as Twitch, enable access to a huge amount of real world user data related to strong emotional cues.

Research Goal

The aim of this thesis is to collect eye movement data of e.g. online gaming users and evaluate if certain player states (e.g. winning/losing) can be recognized based on eye behaviour. Based on the results and bachelor/master level, applications how this information can be used for building attentive user interfaces, have to be developed and implemented.

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