



# Eye-Gaze Based 2D Platformer Game

## Open Bachelor/Master Thesis

### Background

Eye-Gaze as an interaction possibility in games is still under-used and under-evaluated. However, with recent advances in neural network-based eye-gaze estimation, this mechanism will become widely available. Therefore, novel interaction concepts that leverage this technology will be feasible. One possible area are 2D platformers.

### Research Goal

The aim of this thesis is to extend the game “Shed Some Fear”, which already incorporates some eye-gaze-based interactions. A related work research should be conducted and interdisciplinary and information science approaches should be considered.

A prototype should be designed and implemented that investigates the user experience of such an approach as well as its applicability to reduce eye strain. Finally, the defined hypothesis should be evaluated by conducting a study.

Based on bachelor/master level the scope is adapted.

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