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Paper Review:
eyeSelfie: Self Directed Eye Alignment using Reciprocal Eye Box Imaging

Link:

http://web.media.mit.edu/~tswedish/projects/download/eyeSelfie2015swedish.pdf

Description:

Briefly describe the paper and its contribution to computer graphics and interactive techniques. Please give your assessment of the scope and magnitude of the paper's contribution.

EyeSelfie describes an approach for self-directed eye alignment to the application of retinal imaging. Unlike previous manual methods used in retinal imaging, eyeSelfie is self-aligning and requires no user readjustment before use, streamlining the retinal imaging process and producing a better user experience. The applications of this paper both towards medical imaging (and, more broadly, to VR and AR approaches) make it a high-impact contribution able to influence future work in various areas.

Clarity of Exposition:

Is the exposition clear? How could it be improved?

The exposition is very clear. It succinctly lays out the motivation for self-directed eye alignment both in the chosen application and in a broader sense, and gives a good overview for the context in which they approached the problem. Furthermore, it lays out both of the two ray-based designs examined as possible options as well as the previous work done in this area (and what needed to be improved on it).

Quality of References:

Are the references adequate? List any additional references that are needed.

The references were adequate, clear, and very thorough.

Reproducibility:

Could the work be reproduced from the information in the paper? Was any code or data submitted with the supplemental materials? If so, does it support the claims in the paper? Are all important algorithmic or system details discussed adequately in the paper?

The descriptions of their approaches (both the Double Ray Cone and Single Ray Cone) were very clearly laid out, explaining their rationale for each approach and specific details (such as the number of rays), even including the performance of their approaches in each case. The

paper further details their testing approaches for their user testing so that it can be reproduced in the future.

Rating:

Please rate this paper on a continuous scale from 1 to 5, where:
1 = Definitely reject. I would protest strongly if it's accepted.
2 = Probably reject. I would argue against this paper.
3 = Possibly accept, but only if others champion it.
4 = Probably accept. I would argue for this paper.
5 = Definitely accept. I would protest strongly if it's not accepted.

5 -- I thought this was an excellent paper which was well motivated, easy to follow, and that makes a strong contribution to the area of eye alignment both in the chosen application described in the paper and in a broader scope.