2019/03/15 - Facial Expressions

Well, I know I said that I might be reaching the point of diminishing returns, but alas, an interesting twist came along. I learned about an open source library call OpenFace which can capture facial expressions, as well do face recognition etc. Decided to learn more about it:

Working with NumesSanguis: https://github.com/NumesSanguis I gained a better understanding of FACS AU: https://www.cs.cmu.edu/~face/facs.htm, and OpenFace: https://github.com/TadasBaltrusaitis/... Basically OpenFace is able to extract features from a video and convert them to FACS AU. What I'm trying to do is grab the data generated by OpenFace and use it to create facial animation.

https://github.com/NumesSanguis/FACSv... does that.

My thoughts are to streamline the process a bit. The idea is to hit a button and it generates the facial animation.

Still a work in progress. You can take a look at: https://github.com/amirpavlo/BYASP

One cool thing I did is write a script which takes the AU data and smooths it. But more over, I don't want to insert a keyframe on every frame of the animation. Would be crazy to do that, and would be very difficult to adjust later on. So I got the idea of finding the peaks and troughs of the graph, then inserting key frames there only. I'm pretty pleased by myself.... haha. And to prove it works here is a diagram