Deep Visual Instruments:

Realtime Continuous, Meaningful Human Control over Deep Neural Networks for Creative Expression

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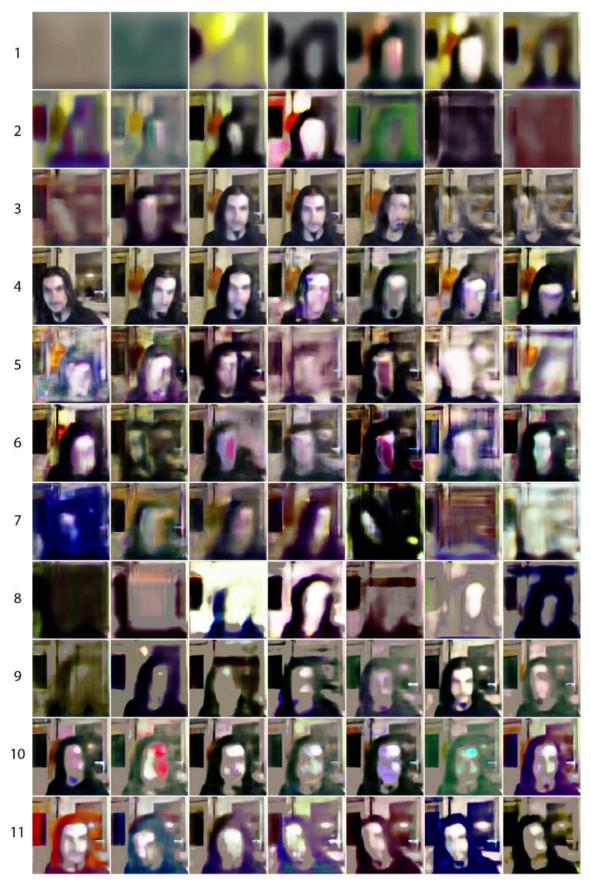


Figure 4.5: A selection of frames covering roughly a two minute experimentation session where we play with the optimisation hyperparameters learning rate, momentum, and gradient clipping threshold. Time flows from left to right, and each frame shows the live reconstruction, i.e. the *Seeing* panel.

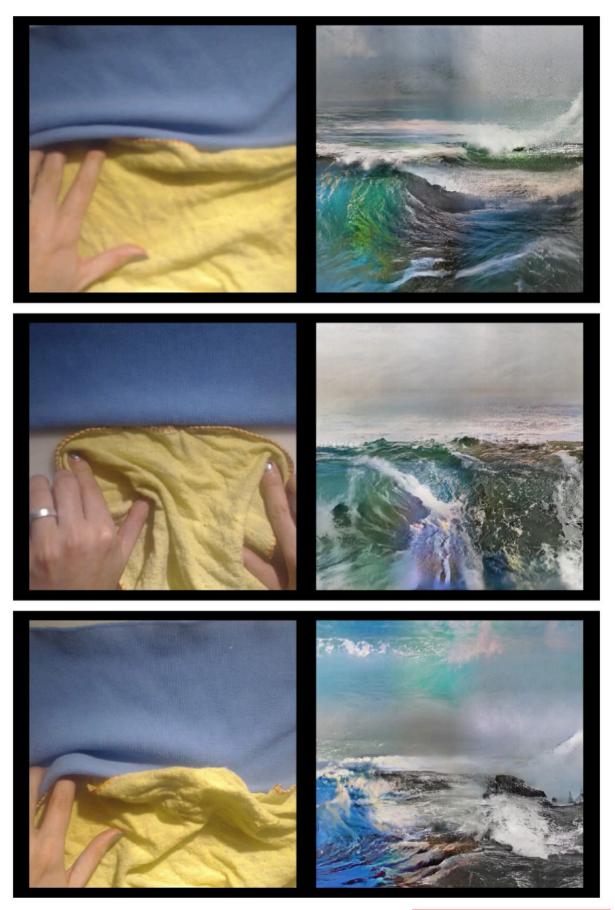


Figure 5.1: Frames from *Gloomy Sunday* (video, 2017), demonstrating subsection 5.4.2: *Digital puppetry*. Each row shows a single frame from the video, and is also a screenshot from our software (with the GUI hidden). In each frame, the left panel shows the live video feed from a camera, and the right panel shows the image generated in realtime by our software.