Supplementary material for: Joint Unsupervised Face Alignment and Behaviour Analysis

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The supplementary material include a video file (example.mpg) that visualizes the example of Fig. 3 in the main manuscript.

Additionally, we provide another example that shows the ability of ARCA method to provide low dimensional texture features that can be used for temporal alignment of behaviour. In the example shown in Fig. 1 two different subjects perform AU45 (blink) in different moments. As can be observed in Fig. 1(b), ARCA+DTW was able to align accurately all the temporal phases, while the low dimensional features extracted by CTW were not able to align the sequences, as indicated by the solid line in Fig.1(c). Finally, Fig. 1(d) shows several frames illustrating the alignment.
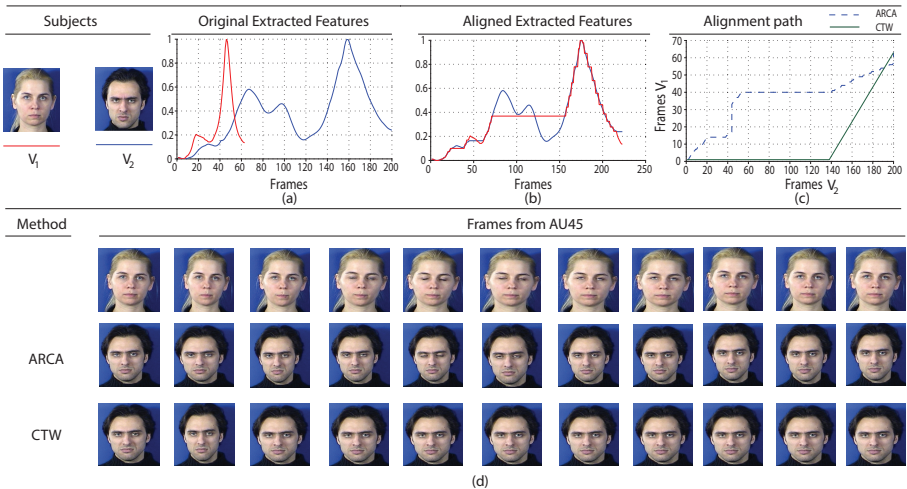
Fig. 1: Aligning the AU45 performed by two different subjects. (a)Original features (b)Aligned features (c) Alignment path. (d) Frames detected form the ALCA method (second row) and CTW method (third row)