Fast and realistic 2D facial animation based on image warping

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Abstract: Facial animation has contributed to many fields such as movies, computer games, education and e-commerce. Facial animation is obtained in two ways: pre-calculated animation and real-time animation. Pre-calculated animation often produces very realistic results with very powerful computer systems and is often used for animated movies. Real-time animation often produces lower quality results due to the real-time requirements and is often used for interactive applications. We propose in this paper a real-time animation method which operates on a 2D image of face. We simulate the effect of facial muscles with image warping techniques. Our method can produce realistic facial expressions and can be easily deployed on not very strong environments such as web pages, mobile phones and PDAs. ?? 2009 IEEE.

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