

Deepfake Motion Model

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Abstract: *Deepfake Motion Model is an integrated AI-based multimedia framework that combines face swapping, lip synchronization, and motion transfer into a unified system. Leveraging computer vision, deep learning, and geometric morphing, it enables realistic manipulation of facial expressions and identities across images and videos. This project provides a real-time, modular interface built with Flask and Python, offering hands-on implementation of MediaPipe, OpenCV, and Wav2Lip. Deepfake Motion Model demonstrates the practical application of GANs, facial landmark extraction, and neural-based rendering to bridge the gap between research and real-world multimedia AI tools. It is built with accessibility, modularity, and educational purpose in mind.*

Keywords: FaceSwap, Motion Transfer, Face Detection, Lip Sync, Deep Learning Model, Animation, Virtual Reality

