Detecting Synthesized Faces Using Deep CNN Architecture

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Abstract: *Recent improvements to deepfake technology have raised worries about incorrect information, security flaws, and identity theft. This study presents a hybrid deep learning model that includes convolutional neural networks (CNN) to correctly identify phoney faces. The technique employs CNN and transformer-based architectures to detect anomalies in generated images across space and time. We use feature extraction and attention approaches to enhance detection robustness against hostile attacks. When compared to benchmark datasets, the proposed model outperforms previous approaches. Real-time deepfake detection is critical for digital security and media integrity, and our technology offers a reliable and extendable solution*

Keywords: CNN, Deep learning, Feature extraction, classification, Image Processing

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