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A Survey on Identification of Deepfake Videos using Artificial Intelligence

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Abstract: In the world of ever-expanding social media platforms, deepfakes are seen as the biggest threat posed by AI. There are many scenarios where realistic deepfakes with face swaps are used to create political pranks, and fake terrorist incidents and people intimidation are easy to imagine. Examples include Brad Pitt and Morgan Freeman fake videos. Advances in computing power have made deep-learning algorithm so powerful that it has become so easy to create human-synthesized indistinguishable videos, commonly known as deepfakes. It's easy to imagine scenarios where this realistic face could be traded for a fake video to do political pain, fake terrorist attacks and intimidation. This work describes a survey on novel deep learning- based techniques that are effective in telling apart phoney and authentic videos produced by AI.

Keywords: Deepfakes, Neural Networks, long short-term memory, Convolutional Neural Networks

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