

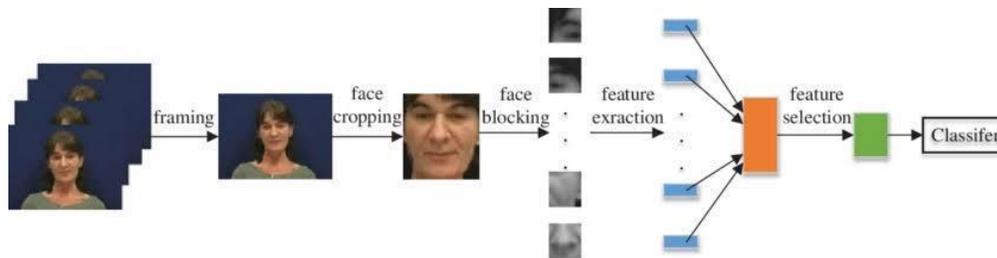
Research Paper on Introduction of Deepfake

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Abstract: Deepfake technology, powered by deep learning advancements and computational capabilities, is a rising challenge in the digital era. This paper presents a concise overview of deepfake detection research, methodologies, challenges, and ethical considerations. The paper first outlines state-of-the-art detection techniques, both traditional forensic and machine learning-based, that exploit subtle cues to differentiate between genuine and manipulated media. It then delves into the technicalities of deepfake generation, emphasizing the importance of understanding these techniques for developing robust detection mechanisms. The paper also examines the societal impacts of deepfakes, including implications for privacy and free expression, and the role of various stakeholders in shaping deepfake development. In conclusion, the paper emphasizes the need for ongoing research, ethical considerations, and informed public discourse to harness the benefits of deep learning while mitigating societal risks.



Keywords: Deepfake

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