A SURVEY ON DETECTION OF DEEPFAKES

A PREPRINT

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September 16-22

ABSTRACT

Detection of manipulated images have been becoming an important topic in social security. With the development of computer vision and deep learning, fake images can be easily generated and propagated over social networks. Commercial editing tools such as Photoshop and GIMP empower anyone non-expert to create sophisticated images. Deepfakes, with the help of deep learning especially GAN, can produce large-scale photorealistic fakes at a hand's turn. These fakes have caused huge damage to celebrities even world leaders, so it is an emergency to study the detection of them. In this paper, I investigate the methods of detection including detection to handcrafted manipulations and deepfakes.

*Use footnote for providing further information about author (webpage, alternative address)—*not* for acknowledging funding agencies.