A SURVEY ON DETECTION OF DEEPFAKES

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Zhendong Mao*

University of Science and Technology of China zdmao@ustc.edu.cn

Penghui Wang

University of Science and Technology of China wph0213@mail.ustc.edu.cn

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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 easily generate and propagate 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 national 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.

1 Introduction

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