Abstract

In recent times, the rise of machine learning based softwares that are used to create deepfakes are terrifying the world. These deepfakes are so realistic that they hardly leave traces of their fakeness. They are being applied in mass amount to blackmail and humiliate people. This paper explores the consequences of this problem and also the methods that can be used to tackle this problem.

Introduction

The purpose of this paper is to give the reader a clear understanding of deepfakes like how deepfakes are generated and used. This paper also explored the ways deepfake can be detected along with the possible applications of deepfakes in near future. Overall, this paper is successful in generating a clear view of deepfakes.

Methods

Deepfake detection still have a long way to go. One of the major way to detect deepfakes are by calculating the rate of eye blinking in a video. A person blinks every 2 second which isn't normally seen in the deepfakes. So, by checking each frame of an analyzed video , computing the rate of blinking in the video and later comparing that to the normal rate might give us the necessary result.

Result

The outcome of all these experiments are outstanding but deepfakes still have lots of area for improvement. To generate an excellent deepfake video, one must have millions of images including images taken in different lightnings and profile shots from different angles. As most of the images found online are front faced, it restricts the quality of deepfakes.

Conclusion and Discussion

Deepfakes really are fascinating and has major potential of influencing the society . It can be hoped that in future by exploring the vast possibilities of deepfakes, more positive innovative applications can be seen. After all, deepfakes are a shining light which changed the course of humanity.