**Deepfake Detection: A Comprehensive Study and Model Development**

**Abstract:**

Deepfake refers to a type of synthetic media, usually video, images, or audio recordings, that is used or created using deep learning.

Deepfake technology makes it easier to create real videos and photos, raising concerns that they could be used to spread misinformation or harm people. Deepfake technology has made great progress in recent years, making it difficult to distinguish real from fake photos. This has raised concerns that fake photos could be used for malicious purposes such as political propaganda or online fraud. Therefore, there is an increasing need for methods to visualize deep images. Therefore, introducing deepfake classification techniques becomes very important. In this paper, the authors present a class method for deep image classification using adaptable learning opportunities. This method will help distinguish images from real and fake faces. The authors use the scheme to utilize real and fake face classification data. Loss, accuracy, precision, recall, AUC and F1 scores were not used to analyze the effectiveness of the proposed method.The findings of this research demonstrate that the our model attains a higher accuracy rate when contrasted with the previous models.

**Keywords:**

Technology

Adaptable

class

Learning opportunities

Research