

INTERNATIONAL JOURNAL OF LAW MANAGEMENT & HUMANITIES

[ISSN 2581-5369]

Volume 6 | Issue 6

2023

© 2023 *International Journal of Law Management & Humanities*

Follow this and additional works at: <https://www.ijlmh.com/>

Under the aegis of VidhiAagaz – Inking Your Brain (<https://www.vidhiaagaz.com/>)

This article is brought to you for “free” and “open access” by the International Journal of Law Management & Humanities at VidhiAagaz. It has been accepted for inclusion in the International Journal of Law Management & Humanities after due review.

In case of **any suggestions or complaints**, kindly contact Gyan@vidhiaagaz.com.

To submit your Manuscript for Publication in the **International Journal of Law Management & Humanities**, kindly email your Manuscript to submission@ijlmh.com.

A Study on Deepfakes and Copyright Infringement

SHRIYA SAYANAK¹

ABSTRACT

With COVID-19 came the infodemic as well. This resulted in the bombardment of excessive information, whether true or not. Extreme information is thrown at us via social media. Sometimes, this information or the content tends to be fake. The technical development is so advanced that today, we can create fake content. In this research paper, we are trying to explore the growing technology of artificial intelligence and machine learning technology. With the use of artificial intelligence and machine learning, the computer can produce realistic videos, audio and images which are not real. They are fake videos which are incredibly natural looking. This could create a lot of legal implications and intellectual property rights violations. In this research paper, we are trying to discover the legal consequences of deep fake videos, audio and images. We would also explore the copyright infringement that these deep fakes are creating. This study has treated profound intellectual property violations and cybercrime violations. In this research paper, we will also explore copyright violations because of the deep fakes and how the moral and economic rights of the original creator are being violated or infringed

Keywords: *deep fakes, machine learning technology, artificial intelligence, legal implications, copyright infringement, moral right, economic right.*

I. INTRODUCTION

Deepfakes technology can manipulate and generate info that is similar to someone else's likeness, potentially infringing their IPR. Deepfakes are synthetic media that use artificial intelligence to create realistic-looking but entirely fake videos, audio recordings or images. They are often made by training artificial intelligence algorithms on extensive data sets of accurate content and then using that knowledge to create convincing fakes. While they can have legitimate use in the field of entertainment or education. It can also raise significant ethical and security concerns as it can be used to spread wrong information and create misleading content. Deep fakes and copyrights are intertwined in many complex ways. When someone makes a deep fake using copyrighted material, it can potentially infringe upon the copyright holder's rights. Copyright holders have a legal right to control how their content is used and authorised.

¹ Author is an Advocate in India.

Deep fake fit and audio can be seen as unauthorised reproduction and distribution. The legal implication can vary by jurisdiction and depend upon factors such as the purpose of the deep fake, whether it is for commercial gain and the potential impact on the original work. Copyright laws are being adapted to address the challenges posed by the fix, but the legal landscape is still evolving as this technology advances.

(A) Research questions

1. What are deepfakes, and What legal remedies are available to combat the deepfakes?
2. How do the deep fakes affect copyright infringement?

(B) Research objectives

1. This research aims to find out the legal implications of deepfakes. The potential infringement that the deep fake videos and audio have on copyright infringement and how this would affect the original works.
2. The legal implications and the legal remedies available to the author in case of copyright infringement of his rights by a deep fake.

II. WHAT ARE DEEPFAKES?

Deepfakes are doctored videos, audio and images created by artificial intelligence. Deepfakes are synthetic media that use artificial intelligence to create realistic-looking but entirely fake videos, audio recordings and images. Deep fakes are making convincing pictures, audio, and videos. The videos and audio are so compelling, yet they are entirely fake. They are so real that it is impossible to distinguish them. Deep fakes are created using machine learning technology that can use deep learning technology and create these fake deepfakes. Deep fake is generated from deep learning and fake, which results in deepfake. Deep learning tech is a branch of machine learning that applies to neural net simulations to create massive data sets that, in turn, help in creating counterfeit content. Machine learning is a branch of AI in which if the machine that is computer is fed enough data, it can create fake content. The primary technology underlying this is the GAN Generative Adversarial Networks. The GAN technology combines the two algorithms which generates fake content and the other grades its efforts teaching the system to be better. The combination of the two algorithms creates more accurate fake content. GAN technology is also used to create entirely new humans that are robots.

This technology relies on analyzing large sets of data samples to learn to mimic a person's facial expressions, mannerisms, voice, et cetera. Deep fake can create content where one person can be swapped for another, or they can make an entire misrepresentation of the person. For

example, there is a Cadbury advertisement where anybody can be in the advertisement video with the Bollywood celebrity Shahrukh Khan. In this, they are using deep fake technology to create a video using our video. A few more examples of deep fake videos include the Rakhi advertisement by Hrithik Roshan, where anyone could upload a picture on the website and get a video of the ad with the Bollywood celebrity Hrithik Roshan. Recently, in the Delhi elections, we have seen fake videos of politician Manoj Tiwari speaking various languages. There are also many pornographic clips of celebrities which are created using deep learning technology. All these videos are using the deep and are violating the rights of multiple human beings

(A) Why is Deepfake dangerous?

Deep fakes are the combination of generated and discriminator algorithms, which is caused by deep learning technology using various sets of data. The deep fake technology creates exceptionally realistic-looking videos, audio and images that lead to many legal implications, especially copyright infringement. Deepfakes are used to create Art, entertainment, Et cetera. Some unethical uses create blackmailing and reputation, harming videos and audio, Creating caller response services, creating false evidence, fraud, misinformation and misrepresentation, political manipulation, manipulation, et cetera. The most unethical use of deepfakes is in pornography. Deepfakes are used to create illegal pornography and child pornography, hate speech and defamation. This technology is used to deliberately misrepresent the individual. This when accessed by malicious users can do an excessive amount of harm.

(B) Can deepfakes be detected?

This is the most crucial question when it comes to deep fake technology. Combating deep fakes is very difficult because, with the growing technology and growing data available on the Internet, it has become effortless to create these kinds of fake videos which look incredibly realistic. It is highly impossible to detect deep fake videos by the human eyes, and with the growing technology, Detecting deep fake videos is complicated by computer software as well. However, there is artificial intelligence software which helps in the detection of counterfeit videos. But with the growing believe-ability of fake videos and images, sometimes this software also fails to detect the deep fakes

III. COMBATING DEEP FAKES

There can be four methods to combat deep fakes, namely legal regulation and legislation, corporate policies and voluntary action, education and training, and anti-deep fake technology technology.

Technology is developing rapidly, and we cannot cope with the legislation and regulations to curb the legal implications of such highly developing technology. As of now, the deepfake creation and circulation is not an offence- Criminal as well as civil laws do not address it. However, defamation, libel, identification, fraud, et cetera are identified as wrong, and there is a punishment for such acts, but creating and circulating deep fakes is not covered. The major wrong that is the creation and circulation of pornographic content is also not covered in the legal regulation. We have seen that the product of fake identity in pornographic films is also a significant thing that is happening with the help of deepfake technology. But there is no legal regulation to curtail this kind of behaviour, or there is no legal regulation to punish the wrongdoers. Another problem of law is the jurisdiction when handling these crimes. Deep fake videos can be generated from the entire world, and when we are trying to put a legal implication on the wrongdoer, there comes the problem of deciding by which law the wrongdoer should be punished under.

Corporate policies and voluntary actions can provide more effective ways to deal with the deep fakes. The social media companies have to be more vigilant and have to take more active participation in detecting and curbing the creation and circulation of deep fakes. There has to be some kind of policy of the company where the fake videos if detected, then the company must take strict action against the wrongdoer. The social media companies must build more reliable, trusted platforms which would give us more authentic content and curb the circulation and creation of deep fakes.

Education and training play a very important role in curbing of fake videos and stopping the circulation of such content. We have to get ourselves educated to know which videos are authentic and which videos are not authentic. Even though we might feel that some videos are extremely realistic, simply forwarding them without giving a second thought is what leads to more of such wrongful acts and harms the society at large. When we see the political campaigns during the elections, there are a lot of fake videos and images that are circulated on the social media. This behavior must be curtailed and training must be provided from the very school level to stop the unthought forwarding process. Sometimes the people tend to mindlessly forward the content. This results in more circulation of counterfeit content.

The need of the hour for the government and the social media companies is to create anti deep fake technology. Where the deep fake videos and content can be detected and circulation can be stopped. The problem with the deep fake technology is to prove that something is fake. Because the technology is so good at creating realistic videos that most of the common people would think it to be authentic. With the growing technology, there can be some kind of anti-

deep fake technology as well. The block chain technology can also be used in this mechanism. non-verified videos must be stopped from circulation. There can be many anti-deep fake legislations that the government can take up.

IV. COPYRIGHT INFRINGEMENT

The creation of Deepfake videos could lead to copyright infringement as it may infringe upon the creator's idea or imagination. In creation of deep fake videos, there is a violation of copyright. When the person who is creating the video uses the picture, face or video of the person, this could lead to infringement of intellectual property rights.

The World Intellectual Property Organization published the “ draft issues, paper on intellectual property policy and artificial intelligence” and in December 2019² There were two questions that arose from the WIPO Draft. Firstly, deep fakes are created based on data that may be subject to copyright, ownership, being a copyright-related issue in deep fakes and secondly the fair profit sharing system for people whose resemblance and show is used in something that is deceptive in nature because it is not genuine³

There is an ownership right that is infringed by creation and circulation of deep fakes. This is also seen in creation and circulation of fake pornographic videos as well. even though the work can be in the form of animation or cinematography. The original video would still be protected under the copyright act. Taking characters out of the original work of the creator is copyright infringement. Using someone’s work without the permission of the author, using someone’s face to misrepresent, the identity is all under the copyright infringement

The copyright of the author has multiple rights such as exclusive economic right and moral right. When someone uses the work without permission from the original author, the economic as well as moral right is violated. According to the article 6 of the Berne convention every author has a set of moral rights. This is violated when the work of the author is used without consent of the author and the impact of the work on original work is also effected as a result. Moreover, when deep fake videos are used for commercial purposes, the fake creator gets economic benefit and the original creator won’t get any benefit economically. This affects the economic rights of the original author. This is against the copyright policies of getting exclusive economic rights over the work. When we are using the work of some other author, it is always

² Alvarez Risco and Del Aguila Arcentales 2021

³ D Hendrawan, C. Andersen , D. Tiopan, S. kurniawan, M. malinda. “Judicial Review of Copyright Infringement in the Use of Deep Fake in the Creative Industry in Indonesia.” *International Journal of Cybercrimes* 17, no. 1 (June 2023).

advisable to give due credit to the original author of the work. But when we are talking about deep fake videos, this does not seem to happen.

Moreover, the deep fakes also tend to violate many cybercrime regulations also. In India, we do not have a special regulation yet to the deep fakes. Although we don't have a dedicated law, we may still use the combination of many laws to counter the deepfakes.

V. CONCLUSION AND SUGGESTION

We all have seen in the past decade that technology is growing at the rate of speed of light. This growth in technology is inevitable and is necessary for human evolution as well. This technology can have a positive impact but also a negative impact. Deep fake technology is one such technology where in it can have more negative impact than the positive. Although this is true, the technology is still going to develop much more than it is developed today. To combat the negative effects we need to have proper legal regulation. Apart from legal regulation, the social media companies have to ensure to provide the customers with a trustworthy platform as well. The customers that are the consumers of such content must also be aware that not all the content that we see on social media is true and authentic. The customers also have to be vigilant and educated and not forward the content without checking for authenticity. Apart from this copyright infringement has become a new norm, data manipulation and creating a hostile environment for politicians, journalists, celebrities et cetera. There is a need for stricter regulations and such regulations must keep in mind the developing technology. The government needs to make special regulations regarding the deep so that they are not misused by irresponsible parties.

VI. REFERENCES

- Mika Westerlund. “The Emergence of Deep Fake Technology: A Review.” *Technology, Innovation Management Review* 9, no. 11 (November 2019).
- D Hendrawan, C. Andersen , D. Tiopan, S. kurniawan, M. malinda. “Judicial Review of Copyright Infringement in the Use of Deep Fake in the Creative Industry in Indonesia.” *International Journal of Cybercrimes* 17, no. 1 (June 2023).
- T. Mosley. “Perfect Deep Fake Technology Could Arrive Sooner than Expected,” 2019. <https://www.wbur.org/hereandnow/2019/10/02/deepfake-technology>.
- <https://spectrum.ieee.org/what-is-deepfake>
- <https://www.youtube.com/watch?v=UcQet3Tcx9M>
