

## Comparative Analysis of Criminal Law Regulations Towards the Phenomenon of *Deepfake Pornography*

Ni Gusti Agung Ayu Mas Tri Wulandari

Universitas Pendidikan Nasional

---

### Article Info

#### Article history:

Received: 5 May 2026

Publish: 11 May 2026

---

#### Keywords:

*Deepfake Pornography;*

*Artificial Intelligence;*

*Victim Protection;*

*Indonesian Criminal Law;*

*United States.*

---

### Abstract

*The rapid development of artificial intelligence (AI) over the past decade has introduced new challenges in criminal law, particularly the phenomenon of deepfake pornography which poses serious threats to victims' privacy, reputation, and personal integrity. This study employs a normative juridical approach using the statute approach, conceptual approach, and comparative approach to analyze Indonesian regulations and compare them with the United States. Data were collected through library research including legislation, government policies, academic articles, and relevant court decisions. Findings reveal that Indonesian regulations such as Law Number 1 of 2024 on Electronic Information and Transactions, Law Number 44 of 2008 on Pornography, Law Number 27 of 2022 on Personal Data Protection, and the new Criminal Code Law Number 1 of 2023, do not explicitly regulate AI-based synthetic media, creating normative gaps and legal uncertainty that worsen victims' positions. In contrast, the United States has introduced policies such as the TAKE IT DOWN Act requiring the removal of non-consensual intimate content within a specific timeframe. Victim protection principles and the right to be forgotten applied in the US may serve as valuable inspiration for Indonesia to strengthen its legal framework. This study emphasizes the urgent need for criminal law reform through amendments to the Pornography Law, the ITE Law, or the establishment of a specific law on AI-generated pornography to ensure more effective, fair, and adaptive legal protection for victims in the digital era.*

#### Keywords:

*This is an open access article under the [Lisensi Creative Commons Atribusi-BerbagiSerupa 4.0 Internasional](https://creativecommons.org/licenses/by-sa/4.0/)*



---

### Corresponding Author:

Ni Gusti Agung Ayu Mas Tri Wulandari

Universitas Pendidikan Nasional

Email: [mastriwulandari@undiknas.ac.id](mailto:mastriwulandari@undiknas.ac.id)

---

## 1. INTRODUCTION

The development of digital technology over the past decade has had a significant impact on human life. Artificial intelligence (AI)-based innovations not only bring convenience but also create complex new challenges. One of the most controversial phenomena is *deepfake pornography*, synthetic, sexually suggestive content created by manipulating a person's face or body to appear realistic. This phenomenon has become a global issue because it raises serious concerns about the privacy, reputation, and personal integrity of victims. George emphasized that deepfake pornography constitutes a serious violation of a victim's privacy and reputation that is not yet fully addressed by federal law in the United States.

In Indonesia, a similar phenomenon is emerging and having significant social

523 | Comparative Analysis of Criminal Law Regulations Towards the Phenomenon of *Deepfake Pornography* (Ni Gusti Agung Ayu Mas Tri Wulandari)

impacts. AI's ability to generate and distribute visual information creates new challenges for the national legal system. Kirana & Silalahi emphasize that the development of AI demands faster regulatory adaptation to anticipate risks to Indonesians' personal data. The impact on victims is severe, as reputations can be ruined even if the victim never committed the act. Yudha et al. assert that victims of deepfake pornography experience multidimensional harm, including social, psychological, and legal harm, while positive legal instruments are not yet fully adequate to provide protection.

From an Indonesian criminal law perspective, the abuse of AI for generating synthetic pornographic content remains a gray area because it hasn't been explicitly regulated. Current law enforcement relies on the 2008 Pornography Law, the 2024 Electronic Information and Transactions Law No. 1, the 2022 Privacy and Dependence Law, and the 2023 New Criminal Code. However, these regulations do not yet accommodate the concept of *synthetic media* generated without physical contact or direct involvement of the victim. Afif emphasized that the ITE Law does not explicitly regulate synthetic content generated by artificial intelligence, so interpretation of the article often requires legal analogy. This situation worsens the victims' situation, as content can recirculate even after it has been removed, leading to repeated re-victimization. Simanjuntak added that personal data protection will only be effective if regulations take into account technological dynamics, including digital manipulation, biometrics, and facial reconstruction.

Given these developments, it is clear that existing legal instruments are insufficient to comprehensively address the need for victim protection. Therefore, specific regulations regarding *AI-generated pornography* It is important to avoid a legal vacuum and uncertainty in enforcement. In comparison with the United States, which has formulated a special offense against *non-consensual deepfake pornography*, this can inspire Indonesia to adapt these principles into its national legal system. Therefore, establishing new norms in criminal law—whether through revisions to the Pornography Law, the Electronic Information and Transactions Law, or the drafting of specific legislation regarding AI—is an urgent need to provide legal protection that is effective, fair, and in line with technological developments.

## 2. RESEARCH METHODS

This research uses a juridical-normative approach to analyze regulations governing criminal law protection for victims of artificial intelligence (AI)-based pornographic content creation in Indonesia. The analysis was conducted on recent legislation, including the 2024 Electronic Information and Transactions Law (ITE Law), the 2008 Pornography Law, the 2022 Privacy and Dependence Law, and the morality provisions in the National Criminal Code.

Data was collected through a literature review, reviewing laws and regulations, government policy documents, scientific articles, and previous research related to digital crime and personal data protection. The approach used included: *statute approach* (systematic analysis of regulations), *conceptual approach* (understanding of legal concepts from academic literature), and *comparative approach* (comparison of Indonesian regulations with the United States).

The study population included all national regulations related to digital pornography, image manipulation, and personal data protection, while the sample consisted of relevant laws and regulations, scientific journals, academic reports, and court decisions.

Data were analyzed qualitatively using content analysis (*content analysis*) to identify regulatory patterns, find gaps in norms, and assess challenges to law enforcement. This analysis aims to formulate solutions. normative in the form of updating criminal law, strengthening personal data protection regulations, and improving law enforcement mechanisms.

### 3. Research result

The development of artificial intelligence (AI) technology has given birth to a new phenomenon in the form of *deepfake pornography*, synthetic, sexually suggestive content created by manipulating a person's face or body to appear realistic. This phenomenon has become a global issue because it raises serious concerns about the privacy, reputation, and personal integrity of victims. George emphasized that deepfake pornography constitutes a serious violation of a victim's privacy and reputation that is not yet fully addressed by federal law in the United States. This perspective demonstrates that technological developments are progressing far faster than regulatory reforms, opening up previously unimaginable opportunities for digital crime. This global phenomenon requires a more adaptive and cross-border legal approach.

In Indonesia, the phenomenon of *deepfake pornography* began to emerge as a form of digital crime that has significant social and psychological impacts. Muhammad Faturrachman emphasized that *deepfake pornography*, which broadly targets social media users, demands specific regulations because the applicable provisions still rely on the ITE Law, the PDP Law, and the Criminal Code. The impact on victims is severe, as reputations can be ruined even if the victim never committed the act. Tesalonika Liony Polandos, Wenly R. J. Lolong, and Merry Lenda Kumajas explain that the misuse of deepfake applications that utilize AI is often used without permission to damage reputations, blackmail, or exploit victims. This statement emphasizes that the characteristics of AI-based crimes are far more complex than conventional pornography, as they can be produced without limits, distributed anonymously, and are difficult to permanently remove. Sarah Amanda Uly Sijabat and Diana Lukitasari added that deepfake pornographic image and video content can be classified as a criminal act of defamation, as they attack the victim's honor and reputation in the digital space.

A real-life case in Semarang in 2026 reinforces this urgency. Undip student Chiko Raditya Agung Putra was found guilty of producing over 1,100 immoral deepfake content using the images of SMAN 11 Semarang alumni without permission. The judge sentenced him to one year in prison and a fine of Rp 2 billion, more than the prosecutor's demand. This case caused deep psychological trauma for the victim and public unrest due to its digital spread, while also demonstrating that existing regulations are insufficient to effectively prevent or prosecute AI-based crimes.

In the context of Indonesian law, existing regulations do not explicitly regulate this phenomenon of *deepfake pornography*. The 2008 Pornography Law only focuses on content created and distributed in real life, thus excluding AI-based synthetic content. The 2024 ITE Law regulates the distribution of immoral content, but does not address the production of manipulative content. The 2022 PDP Law focuses more on administrative protection of personal data, thus not yet providing comprehensive criminal protection. The 2023 New Criminal Code expands the scope of crimes against morality but still places pornography within a traditional framework.

Andi Hamzah's book "Indonesian Criminal Law" explains that national criminal

law often lags behind technological developments, so regulatory updates are needed that are more adaptive to digital crimes. This view is relevant to the phenomenon of *deepfake pornography*, which has not been explicitly touched by regulation.

In addition, the official report of the National Legal Development Agency emphasized that the development of information technology requires harmonization of regulations, because many new criminal acts are not yet clearly regulated in the Criminal Code or sectoral laws. This shows that national regulations are still reactive, not preventative. The United States has taken more progressive steps in addressing the phenomenon of *deepfake pornography*. Starting in 2025, the federal government passed the TAKE IT DOWN Act, a law that specifically criminalizes the distribution of nonconsensual intimate content, including that generated by artificial intelligence. This law provides more comprehensive protection for victims by establishing criminal sanctions in the form of fines and imprisonment, and requires digital platforms to remove infringing content within 48 hours of an official request. Thus, this regulation directly targets the phenomenon of *deepfake pornography*, which was previously difficult to prosecute traditional.

In addition to federal regulations, nearly all states in the US have passed additional rules regarding *deepfakes*. States such as California, Texas, and Virginia have even been regulating the use of deepfakes for political and pornographic purposes since 2019. Although this legal landscape is still in its infancy, because there are differences between federal and state rules, victims have more diverse legal avenues to sue perpetrators, including through *defamation law* and *right of publicity*.

The effectiveness of federal regulations was clearly demonstrated in a real-life case in Ohio in 2026. A man named James Strahler II became the first person convicted in the US in a case of *deepfake pornography*, AI-based was found guilty of producing more than 700 fake pornographic images using the faces of adult women and minors, as well as cyberstalking and blackmailing at least six victims. The judge sentenced him based on the *TAKE IT DOWN Act*, making this case a significant milestone in law enforcement against AI-based crimes in the United States.

Phenomenon of *deepfake pornography* carries serious implications for victims, both psychologically, socially, and legally. From a psychological perspective, victims often experience trauma similar to direct sexual abuse. They face anxiety, depression, and even symptoms of *post-traumatic stress disorder (PTSD)* due to the loss of control over their bodies and digital identities. A study by Diel et al. showed that exposure to deepfake content can lead to significant mental distress, including profound shame and helplessness.

The social impacts are equally severe. Victims often suffer reputational damage in their workplace and social settings. The resulting stigma leads victims to be considered "involved" in the circulating content, even though they never actually gave consent. This situation is exacerbated by the inherent difficulty of completely deleting digital content, resulting in victims experiencing repeated re-victimization each time the content reappears in the public sphere. Report by *Czech Centre for Human Rights emphasized* that victims felt their personal identity was being robbed, resulting in prolonged emotional suffering.

From a legal perspective, victims in Indonesia still face limited protection because regulations do not explicitly regulate this *deepfake pornography*. As a result, available legal avenues often depend on the judge's interpretation and general provisions of the ITE Law or the Criminal Code. In contrast, in the United States, victims have a clearer legal avenue through the *TAKE IT DOWN Act*, which allows them to sue for damages and request

expedited removal of content. International legal analysis highlights that victims of *deepfake pornography* suffer permanent reputational damage and profound emotional suffering, making clear regulations crucial for providing effective access to justice.

Regulatory efforts that need to be undertaken by Indonesia must be oriented towards the formation of special laws that regulate this phenomenon of *deepfake pornography*. This regulation not only emphasizes the distribution of immoral content but also the artificial intelligence-based production process that harms victims. The National Legal Development Agency's report emphasized that regulatory harmonization in the digital era is an urgent need, as many new crimes have not yet been addressed in the Criminal Code or sectoral laws.

In line with this, the Ministry of Communication and Informatics has issued Circular Letter of the Minister of Communication and Informatics Number 9 of 2023 concerning the Ethics of Artificial Intelligence, which provides ethical guidelines for the use of AI in Indonesia, including the principles of transparency, accountability, and data protection. This document forms the initial basis for AI governance, although it does not specifically regulate *deepfake pornography*.

In addition, Deputy Minister of Communication and Digital Technology Nezar Patria's statement emphasized that AI governance is key to mitigating national data risks and security, especially in facing the phenomenon of *synthetic reality*, which is difficult to distinguish from physical reality (Media Indonesia, 2026). Further analysis also shows that AI regulation in Indonesia is still partial, with the ITE Law and the PDP Law as the legal foundation, while the Ministry of Communication and Information Technology Circular Letter serves as the initial guideline for AI governance.

Nasution, Suteki, and Lumbanraja proposed the application of the principle of *right to be forgotten* as a form of protection for victims, so that they can request the removal of content that damages their reputation. This principle is important to provide space for recovery for victims, while also affirming the right to privacy in the digital age.

Indonesia can learn from the United States through the *TAKE IT DOWN Act*, which requires digital platforms to remove nonconsensual intimate content within 48 hours. This model can be adapted to suit national legal contexts, providing tangible protection for victims while *effectively* prosecuting perpetrators. Therefore, regulatory reforms in Indonesia must be comprehensive, harmonious, and adaptive to technological developments.

## 5. CONCLUSION

Phenomenon of *deepfake pornography* Artificial intelligence-based cybercrime raises serious concerns about victims' privacy, reputation, and integrity, while demonstrating that digital technology advances far faster than criminal law reforms. In Indonesia, existing regulations such as the 2024 Electronic Information and Transactions Law, the 2008 Pornography Law, the 2022 Personal Data Protection Law, and the 2023 New Criminal Code do not explicitly regulate AI-based synthetic content, creating a legal vacuum and legal uncertainty. This situation exacerbates the situation of victims, who often experience repeated re-victimization, both socially and psychologically, because digital content is difficult to erase and continues to cause trauma.

In contrast, the United States has taken progressive steps through the *TAKE IT DOWN Act* and state regulations that specifically criminalize the distribution of nonconsensual, AI-based intimate content. This regulatory model provides

comprehensive protection for victims while also emphasizing the responsibility of digital platforms. Therefore, Indonesia needs to immediately reform its criminal law by establishing specific regulations regarding *AI-generated pornography*, *comprehensive*, *harmonious*, and *adaptive* to technological developments. This will ensure more effective, equitable, and legal certainty for victims, while also affirming their position as legal subjects who must be protected in the digital age.

## 6. BIBLIOGRAPHY

### Book

Andi Hamzah, 2017, *Hukum Pidana Indonesia*, Sinar Grafika.

### Journal

Afif, M, 2025, Tindak Pidana Deepfake Pornography Di Indonesia : Analisis Yuridis Terhadap Kekosongan Norma Dalam KUHP Dan UU ITE', *Jurnal Ilmiah Multidisiplin Vol. 3 (2)*

Faturrachman, M, 2025, Deepfake Pornografi: Studi Konstitusi Dan Penegakannya Di Indonesia, *Jurnal Legislatif, Universitas Hasanuddin Vol.8 (2)*

George, Abigail, 2024, Defamation in the Time of Deepfakes, *Columbia Journal of Gender and Law*

Kirana, A., & Silalahi, R, 2025, Perkembangan AI Dan Regulasi Data Pribadi, *CERDIKA Jurnal Ilmiah Indonesia Vol. 5 (6)*

Nasution, A. V. A., Suteki, & Lumbanraja, A. D, 2025, Addressing Deepfake Pornography and the Right to Be Forgotten in Indonesia: Legal Challenges in the Era of AI-Driven Sexual Abuse, *International Journal for the Semiotics of Law Vol. 38 (7)*

Polandos, T. L., Lolong, W. R. J., & Kumajas, M. L, 2025, Pertanggungjawaban Pidana Pelaku Deepfake Porn Menggunakan Artificial Intelligence, *Jurnal Rectum: Tinjauan Yuridis Penanganan Tindak Pidana Vol. 7 (2)*

Sijabat, S. A. U., & Lukitasari, D, 2024, Konten Gambar Dan Video Pornografi Deepfake Sebagai Suatu Bentuk Tindak Pidana Pencemaran Nama Baik, *RECIDIVE Jurnal Hukum Pidana dan Penanggulangan Kejahatan Vol.13 (2)*

Simanjuntak, and P. H, 2024, Perlindungan Hukum Terhadap Data Pribadi Pada Era Digital Di Indonesia: Studi Undang-Undang Perlindungan Data Pribadi Dan GDPR, *Jurnal Esensi Hukum Vol. 6(2)*

Yudha, M., Purwanda, S., Amir, A., Kairuddin, K., Syahril, M. A. F., Samiruddin, S., & Latif, A, 2025, Perlindungan Hukum Bagi Korban Penggunaan Deepfake Dalam Kejahatan Pornografi, *Indonesian Journal of Law and Shariah Vol.2 (1)*

### Article Internet then Website

Badan Pembinaan Hukum Nasional (BPHN), 2023, *Laporan Tahunan BPHN: Harmonisasi Regulasi di Era Digital*, diakses melalui <https://bphn.go.id/berita/harmonisasi-regulasi-di-era-digital>

Planet Berita, 2026, *Pria Ohio Jadi Terpidana Pertama di AS dalam Kasus Deepfake Pornografi Berbasis AI*, diakses melalui <https://www.planetberita.com/internasional/1002500643/pria-ohio-jadi-terpidana-pertama-di-as-dalam-kasus-deepfake-pornografi-berbasis-ai>

Congress.gov, 2025, TAKE IT DOWN Act. Diakses melalui <https://www.congress.gov/bill/119th-congress/senate-bill/146>

Czech Centre for Human Rights and Democracy, 2025, How Deepfake Pornography

- Violates Human Rights and Requires Criminalization, diakses melalui <https://www.humanrightscentre.org/blog/how-deepfake-pornography-violates-human-rights-and-requires-criminalization>
- Diel, A., Lalgı, T., Mellis, S., Teufel, A., & Bäuerle, A, 2025, The harm of deepfakes: a scoping review of deepfakes' negative effects on human mind and behavior', *AI & Society*, Springer, diakses melalui <https://link.springer.com/article/10.1007/s00146-025-02774-0>
- Media Indonesia, 2026, Tata Kelola AI Jadi Kunci Mitigasi Risiko dan Keamanan Data Nasional, diakses melalui <https://mediaindonesia.com/humaniora/878313/tata-kelola-ai-jadi-kunci-mitigasi-risiko-dan-keamanan-data-nasional>
- Puspitoningrum, A, 2026, Mahasiswa Undip divonis 1 tahun penjara atas produksi 1.100 konten deepfake asusila', *IDN Times Jateng* diakses melalui <https://jateng.idntimes.com/news/jawa-tengah/produksi-1-100-konten-deepfake-asusila-mahasiswa-undip-divonis-1-tahu-00-1kqgx-h65r98>
- Tentang AI, 2026, Regulasi AI di Indonesia: Kerangka Hukum dan Etika Terkini, diakses melalui <https://tentangai.com/regulasi-ai-di-indonesia-kerangka-hukum-dan-etika-terkini>
- Legislation
- Law of the Republic of Indonesia Number 1 of 2024 concerning the Second Amendment to Law Number 11 of 2008 concerning Electronic Information and Transactions (State Gazette of the Republic of Indonesia 2024 Number 1, Supplement to the State Gazette of the Republic of Indonesia Number 6905).
- Law of the Republic of Indonesia Number 27 of 2022 concerning Personal Data Protection (State Gazette of the Republic of Indonesia 2022 Number 120, Supplement to the State Gazette of the Republic of Indonesia Number 6810).
- Law of the Republic of Indonesia Number 1 of 2023 concerning the Criminal Code (State Gazette of the Republic of Indonesia 2023 Number 1, Supplement to the State Gazette of the Republic of Indonesia Number 6842).