Deepfakes

Why in News?

Denmark has proposed a landmark copyright amendment to **ban the sharing of deepfakes without consent,** protecting **individuals' voices, faces, and likenesses.**

- The proposed law treats realistic deepfakes as **copyright violations**, gives individuals control over their digital likeness for **50 years after death,** and requires platforms to remove such content or face penalties.

What are Deepfakes?

- **About:** Deepfakes are synthetic media (videos, images, or audio) that are digitally altered using **Artificial Intelligence (AI)** to make it look like **someone said or did something they never actually did.** They blur the line between reality and manipulation.
- **Technology Used:** Deepfakes are powered by deep learning, a subset of **machine learning,** which itself is a subset of **AI**.
    - They're created using **Generative Adversarial Networks (GANs)**, where **two neural networks** (a generator and a discriminator) work together to create and refine fake content.
        - GANs use real data to recreate faces, voices, or movements. A **generator makes fake content,** and a **discriminator tries to detect it.** The generator improves until it can fool the discriminator,
        - **Natural Language Processing (NLP)** is used for cloning voices. **Lip-syncing** techniques align deepfake audio with video.
- **Common Types:**
    - **Face swaps**: Replace a person's face in a video with another's.
    - **Voice clones**: Imitate someone's voice to say anything.
    - **Source Video Manipulation**: Make someone appear to do or say things they never did.
- **Detection:**
    - **Clues:** unnatural blinking, facial distortions, mismatched audio, lighting glitches.
    - **Tools:** Adobe, Microsoft, Sensity AI, and others offer deepfake detection software.
        - Social media platforms are beginning to flag or remove malicious deepfakes.

How has India Dealt with Deepfakes?

- India **doesn't have a dedicated law for deepfakes,** but several existing laws offer partial protection.
- **Information Technology Act, 2000 ("IT Act")**: **Section 66D of IT Act,** targets impersonation and cheating via digital means.
    - Further, Sections 67, 67A, and 67B of the IT Act can be used to prosecute individuals for **publishing or transmitting deepfakes** that are obscene or **contain any sexually explicit acts.**
- **IT Rules, 2021**: Require platforms to **remove impersonation or morphed content when**

alerted quickly or lose their **safe harbour' protection** (a provision that protects social media companies from regulatory liability for third-party content shared by users on their platforms).
- **Copyright Act, 1957:** The **Copyright Act, 1957** can be applied if deepfakes use **copyrighted images or videos without permission.** It bars the unauthorised use of any content over which someone holds exclusive rights.
- **Indian Computer Emergency Response Team (CERT-In):** Issued advisories on deepfake threats and measures that need to be followed to stay protected against.
- **Indian Cybercrime Coordination Centre (I4C):** Assists law enforcement agencies in effectively tackling cybercrimes, including deepfakes.
- **Judicial Interventions:**
    - **Anil Kapoor's Case (2023):** Delhi High Court (HC) granted an ex-parte, omnibus injunction restraining from using Anil Kapoor's name, image, or traits (like dialogue phrases) through **AI** or **morphing** for commercial gain.
        - The court held that his personality rights (including name, likeness, and image) deserve protection not just for his own sake, but also for the dignity of his family and friends.
    - **Mr.Shivaji Rao Gaikwad** *(Rajnikanth)* **vs M/S.Varsha Productions (2015):** The Madras High Court granted an injunction **restraining the use of Rajnikanth's name, image, caricature, and dialogue style** in the film Main Hoon Rajnikanth, recognizing his personality rights as a celebrity.

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Prelims

Q. With the present state of development, Artificial Intelligence can effectively do which of the following? (2020)

1. Bring down electricity consumption in industrial units
2. Create meaningful short stories and songs
3. Disease diagnosis
4. Text-to-Speech Conversion
5. Wireless transmission of electrical energy

Select the correct answer using the code given below:

(a) 1, 2, 3 and 5 only
(b) 1, 3 and 4 only
(c) 2, 4 and 5 only
(d) 1, 2, 3, 4 and 5

Ans: (b)

PDF Refernece URL: https://www.drishtiias.com/printpdf/deepfakes-6