Deepfakes, AI-Generated Manipulation, and the Admissibility of Digital Evidence: Emerging Challenges in Criminal Justice

Anandita Singh
PhD Scholar, Dr. Ram Manohar Lohiya National Law University, Lucknow, Uttar Pradesh, India

Abstract

The rapid advancement of deepfakes and AI-driven manipulation poses a significant threat to the criminal justice system, especially concerning the admissibility, authenticity, and reliability of digital evidence. The use of digital evidence has been a key part of investigation and trial for some years now, and includes videos, audio recordings, images, screenshots, CCTV footage, and social media content. But now, with AI, it's possible to generate highly authentic synthetic media that can mimic a person's face, voice, gestures, expressions and behaviours with alarming realism. This development is a challenge to the assumption that is evident in the public that any visual or audio media will be a reliable representation of reality. This paper explores the legal and forensic issues arising from the use of deepfakes in criminal cases. It examines the implications of AI manipulation on investigation, chain of custody, expert opinion, victim protection, accused rights, standards of a fair trial, and judicial decision-making. The study also analyses the importance of Indian legislation such as the Bharatiya Sakshya Adhiniyam, 2023, Bharatiya Nagarik Suraksha Sanhita, 2023, Bharatiya Nyaya Sanhita, 2023, Information Technology Act, 2000, and privacy laws. While these laws offer a base for handling electronic and digital information, deepfakes necessitate a more wary and tech-forward strategy. The paper contends that courts should go beyond the current rules governing electronic evidence and establish an admissibility system dictated by rules that take into account the source of evidence, preservation of evidence, forensic copy, generation of hash values, chain of custody, expert examination, statutory certification and judicial scrutiny. This is essential to avoid the use of fabricated evidence to deceive courts and to ensure that evidence that is indeed accurate is not rejected. The paper argues the need for criminal justice to move from visual to verified trust, fairness, accuracy and accountability in the era of artificial intelligence.

Keywords

Deepfakes, AI-generated manipulation, digital evidence, admissibility, criminal justice, electronic records, forensic analysis, chain of custody, Bharatiya Sakshya Adhiniyam, cyber law.