

The Role of Artificial Intelligence in modernizing Investigation in Indian Criminal Justice System

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Abstract – Artificial intelligence¹ (AI) is the branch of computer science which deals with intelligence of machines where an intelligent agent is a system that takes actions which maximize its chances of success. It is the study of ideas which enable computers to do the things that make people seem intelligent. It has spread throughout the world in various sectors and areas related to any industry, business, or profession, and by using the insights it produce to improve decision making, it is changing every aspect of life. There is no exception to this rule in the Indian legal system. This article first provides a general overview of artificial intelligence by defining and explaining the term. Next, it discusses the current state of artificial intelligence, including how it is infiltrating the Indian legal system, its benefits for legal professionals, its challenges in Indian law, and its effects on Indian legal system.

AI² has the ability to completely change India's criminal justice system. It can improve the effectiveness of investigations and increase access to justice if it is incorporated appropriately with protections for privacy, justice, and accountability. However, the employment of AI that is uncontrolled or biased may result in grave human rights breaches. India's strategy must so strike a balance between ethical governance and technological growth.

Keywords – Artificial Intelligence, Investigation, E-Court, Law, Technology, Digital Age.

I. Introduction

Artificial Intelligence is a machine-based system that makes decisions and predictions for a given set of objectives. Intelligence is commonly considered as the ability to collect knowledge to solve complex problems. In the near future intelligent

¹ Prof. Neha Saini, “ARTIFICIAL INTELLIGENCE & ITS APPLICATIONS”, volume 8, issue 4, IJRTI, 356(2023). Last visited on 12/11/2025

² The abbreviation of Artificial intelligence, Available at https://en.wikipedia.org/wiki/Artificial_intelligence. Last visited on 12/11/2025

machines will replace human capabilities in many areas.³ Artificial intelligence is the intelligence exhibited by machines or software. It is the subfield of computer science. Artificial intelligence is becoming a popular field in computer science as it has enhanced the human life in many areas.⁴ It is imperative that when AI in sentencing should be deployed with the principles of responsible AI in mind.⁵ In other words it is the ability of a digital computer or computer-controlled machine through specific software to perform those tasks which are generally associated with intelligent human beings such as the intellectual processes, the ability to reason and logic. These software systems make decisions which normally require human level of expertise and help people anticipate problems or deal with issues as they come up. As such, they operate in an intentional, intelligent, and adaptive manner.⁶ For comprehensive understanding of the meaning of Artificial Intelligence, following definitions can be considered; According to Oxford Dictionary, “Artificial Intelligence is the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.”⁷

Artificial Intelligence has been defined by Merriam-Webster dictionary⁸ as following;

1. A branch of computer science dealing with the simulation of intelligent behavior in computers.
1. The capability of a machine to imitate intelligent human behavior.

According to Collins English Dictionary, “Artificial intelligence is a type of computer technology which is

concerned with making machines carry out work in an intelligent way, similar to the way a human would. Artificial intelligence is about making computers act more like humans.”⁹

³ N. H. Pati and S. H. Patel, “Research Paper On Artificial Intelligence And It’s Applications”, 44, JAZ, 229,(2023)

⁴ Ibid

⁵ NITI Aayog, ‘Approach Document for India – Principles for Responsible AI (Part 1)’ (India AI, 24 February 2021), available at <https://indiaai.gov.in/signin>. Last visited on 12/11/2025

⁶ Available at <https://www.brooking.edu/research/>. Last visited on 12/11/2025

⁷ Available at <https://www.oxfordlearnersdictionaries.com>. Last visited on 15/11/2025

⁸ Available at <https://www.merriam-webster.com>. Last visited on 15/11/2025

⁹ Available at <https://www.collinsdictionary.com> Last visited on 15/11/2025

According to Encyclopedia Britannica, “Artificial Intelligence (AI) is the ability of a computer or a robot controlled by a computer to do tasks that are usually done by humans because they require human intelligence and discernment.”¹⁰

Thus, based on an analysis of the aforementioned criteria, artificial intelligence can be defined as a machine's capacity to think and behave like a human or to mimic cognitive processes that humans associate with other human minds, such "learning" and "problem solving." To put it another way, it's a type of technology that makes it possible for individuals to reconsider how we incorporate information, evaluate data, and apply the insights that emerge to enhance decision-making. It's revolutionizing every aspect of life across numerous industries. Although there isn't a single definition of artificial intelligence, the majority of formulations have these four characteristics in common;

- a) A system with human-like thought processes,
- b) A system that behaves human-like
- c) A system that possesses logical thinking,
- d) A system that acts rationally.

II. Objectives of the Study

The following are the objectives are taken into the study;

- To examine how Artificial Intelligence (AI) is transforming investigative processes within the Indian criminal justice system.
- To identify the types of AI technologies currently being used in criminal investigations in India, e.g., facial recognition, predictive policing tools, forensic AI, data mining, crime mapping.
- To propose recommendations for developing a robust and ethical AI ecosystem within the Indian criminal justice framework.

III. Research Methodology

The present study comprises doctrinal methods together with an adoption of analytical approaches. That is why doctrinal methods are applied to achieve the objective. To study the developments at national level the various legislative enactments have

¹⁰ Available at <https://www.britannica.com>>artificialintelligence. Last visited on 15/11/2025

been studied as a primary source. Various Websites, Reports and recommendations of various committees have also been taken into this research. As secondary source material books, journals, articles, academic writings, juristic writings, Committees on reforms of Criminal Justice System, News- paper reports that deal with the issue have been used in the research work.

IV. Artificial Intelligence and Indian Criminal Justice System

The concept of law and its justice delivery system are not exempt from the recent tremendous advancements in technology, which have become the most important aspect of every aspect of human life in the modern world. Some experts claim that because humans are emotionally conditioned, using artificial intelligence only in court will aid in reaching a fair resolution. The impact of elements like fatigue and emotional instability will be reduced in the judiciary thanks to artificial intelligence.

The European Commission for the Efficiency of Justice established ethical guidelines for the use of AI in

December 2018. These guidelines offer fundamental principles that judicial professionals can follow when dealing with the swift advancement of AI in the country's legal system. In particular, the Commission has determined that the following five principles must be upheld in the context of the justice delivery system:

- a) The Principle of respect of fundamental rights;
- b) The Principle of non -discrimination, which implies that AI must not be used as an excuse to discriminate marginalized individuals or minority groups;
- c) The Principle of quality and security, with regard to the processing of judicial decisions and data, using certified sources in a security technological environment;
- d) The Principles of transparency, impartiality and fairness, which means that the Data processing methods must be accessible and understandable to individuals
- e) The principle of 'under user control' which implies that user must have a clear information about the data processing in order to make their choices.¹¹

¹¹ Available at

<https://www.google.com/search?q=The+European+Commission+for+the+Efficiency+of+Justice+est>. Last visited on 16/11/2025

In addition, during a meeting in Warsaw¹² in June 2016 for the election of its new members, the General Assembly of the European Network of Councils for the Justice (ENCJ) recognized that the administration of Europe's justice system of the 21st century has radically changed as a result of the use of information and communication technology. Nevertheless, the wave of digital transformation is affecting the judicial delivery system.

V. Artificial Intelligence and Role of Judges in Indian Criminal Justice System

In modern culture, judges play the most important role. In fact, their work might involve a variety of tasks, including sophisticated interpersonal interactions, conflict resolution, and adjudicative duties. Judges' engagement with their duties varies by jurisdiction, and in this regard, certain judges may be more receptive than others. Given these differences, it might be crucial to ascertain how advancements in artificial intelligence might change the function of judges in a legal system. Are there elements of the judicial function that will guarantee that judging will continue to be a human activity in light of AI developments? The best way to respond to this question is to look at how judges' use of technology in court has changed recently.

Talking about replacing judges is inappropriate since judicial decision-making is influenced by numerous factors. These elements include intuition and inductions, as well as the ability to evaluate how a decision will affect society. Additionally, judges do much more than only decide cases or make decisions regarding conflicts; they are crucial in case administration, civil dispute resolution, and judicial commentary that influences how society functions. Many judges also play a significant role in education. Therefore, rather than taking the place of judges in the judiciary, artificial intelligence technology should be used to supplement current human jobs in the judicial administration and enable better efficiencies.

VI. Artificial Intelligence in Indian Judiciary

Artificial Intelligence in the sphere of law is combination of the various techniques along with law involves the use of computer and mathematical techniques to make the law more logical, convenient, helpful, handy, or predictable. The majority of Indian lawyers are a little wary of the idea of artificial intelligence

¹² The Warsaw Declaration on the Future of Justice in Europe, Warsaw 1-3 June 2016. Available at <https://www.google.com/search,The+WARSAW+DECLARATION+On+the+Future+of+Justice+in+Europe%2C Warsaw>. Last visited on 16/11/2025

in the legal field because the profession is very manual and conventional. Without a doubt, they now use computers and laptops rather than typewriters, or they use websites like Manupatra¹³ and SCC online to conduct legal research. However, some attorneys are shifting their focus to artificial intelligence since technology has the potential to alter how attorneys and law firms now operate. However, artificial intelligence is still in its early stages in India, and proper application will take some time. The roles of legal practitioners have undoubtedly expanded as a result of technological advancements in the legal industry.

Artificial intelligence is rapidly making its way to India. We can also observe that throughout this

pandemic, technology has made it possible to create multipurpose gadgets while also making our lives easier and improving our everyday circumstances.

The Supreme Court is exploring the possibility of adopting Artificial Intelligence (AI) to prevent undue delays in delivery of justice, said Chief Justice of India, (Ret.) Sharad Arvind Bobde speaking after inaugurating the 19th biennial State-level conference of judicial officers, organized by the Karnataka State Judicial Officers' Association, he said, "We have the possibility of developing AI for the court system. But this is only for the purpose of ensuring that undue delay in justice delivery is prevented; not to replace human judges and human discretion. I must make it clear as even judges have raised this question."¹⁴

"It is only the repetitive, mathematical and mechanical parts of the judgments for which help can be taken from AI. As you all know, motor accident claim cases basically depend on calculation under a particular formula. We are exploring the possibility of implementing it," Justice Bobde said. "Most of you are computer-savvy and know that the reading speeds with AI use are up to 10 lakhs words a second. Thousands of pages can be scanned in a matter of seconds and you can get the answer you want from the system.

¹³ Manupatra is a leading Indian company that provides legal and business policy information, pioneering online legal research in the country. Its main product is a comprehensive online database of Indian and international legal content. The platform is designed for lawyers, judiciary, government, and students, offering advanced search and analytical tools powered by AI and machine learning, and empowers them with in-depth legislative, regulatory and procedural information critical for decision making without having to go to multiple sources, available at <https://www.manupatrafast.com/default/companyinfo.aspx>. Last visited on 17/11/2025

¹⁴ The Hindu Bengaluru January 12, 2020, available at <https://www.thehindu.com/news/morning-news-digest-january-12-2020/article30547011.ece>. Last visited on 17/11/2025

The enormous backlog of pending cases at all levels of the judicial hierarchy, from Taluka Courts to the Hon'ble Supreme Court of India, is currently a serious issue affecting the Indian judicial system. Recently, there has been discussion of the judicial system collapsing and becoming practically meaningless if early action is not taken. Even worse, the general public would lose faith in the legal system. Justice must be served on time. The Honorable Supreme Court ruled in one of its rulings that justice is denied when it is postponed.

Our nation undoubtedly has the best judges sincere and hardworking, but the growing population and ensuing rise in conflicts cause delays in the administration of justice. India has a vast population of almost 145 crore¹⁵ people, and modern socioeconomic development has led to a rise in awareness of the statutory rights and remedies accessible to the general public to seek justice in the courts. The Indian judiciary has been continuously burdened by the country's massive population, which has led to a huge number of cases that are still outstanding in the legal system. Both sides of the Indian government are extremely concerned about the growing number of cases that are waiting in Indian courts.

The Supreme Court of India published a report titled "Subordinate Judiciary-Access to Justice 2016"¹⁶ asserts capacity constraints are the main reasons for high level of pendency. According to the report, the growing backlog of cases in lower courts can be attributed to the subordinate judiciary's lack of courtrooms and judicial officials, as well as the fact that not all courts have undergone modernization and computerization. Consequently, the delivery of justice is inefficient and delayed, which is detrimental to any society.

The Hon'ble Chief Justice of India, Justice S.A. Bobde, recently proposed to bring in the system of artificial intelligence (AI) which would ease and support the administration of justice in India. However, the idea is to provide aid to the justice delivery system and not to ever substitute the judges. This step is being seen as a revolutionary change in the judicial system. The CJI was addressing the Constitution Day function organized by the Supreme Court Bar Association (SCBA) on 26th November 2019 and in his speech, he has said – "We propose to introduce, if possible, a system of artificial intelligence. There are many things which we need to look at before we introduce ourselves. We do not want to give the impression that this is ever going to

¹⁵ Available at https://en.wikipedia.org/wiki/Census_of_India#:~:text. Last visited on 18/11/2025

¹⁶ Available at https://api.sci.gov.in/jonew/courtnic/rop/2009/3687/rop_869576.pdf Subordinate+Judiciary-Access+to+Justice+2016. Last visited on 18/11/2025

substitute the judges."¹⁷ According to the CJI, machines cannot replace humans specifically the knowledge and wisdom of judges. The deployment of the AI system will help reduce pendency and expedite judicial

adjunction.¹⁸

The President of India, Shri Ram Nath Kovind was also present at the event. He launched the Supreme Court mobile application. Justice Bodbe, while talking about the application, asserted that an artificial intelligence fuelled law translation system will facilitate the quality translation and will further help in improving the efficiency of the Indian Judicial System. Reportedly, the app that was released will translate Supreme Court judgments in more than nine regional languages. We could say that this is the first step in application of AI in Indian Judicial System.

This idea of Artificial Intelligence has been brought up for consideration to restore the effectiveness and efficiency of Indian Justice Delivery System. With the increasing trends in the world of digitalization, this field of 'Artificial Intelligence' may help to reduce the number of pending cases.

VII. Artificial Intelligence and Digital Courts

The Indian government has already launched e-courts, and their reach has to increase more to solve the backlog of cases we deal with. During the Covid-19 pandemic, the Supreme Court and High Courts have been able to function online. The Electronic courts bring a justice serving platform that is more time saving and performs efficiently with better case and court management facilities. Now the information will be available digitally and chances of misplacement of significant documents or evidence will be reduced to a great extent. The evidence of eyewitnesses who cannot present in courts physically by any reason can be recorded through online by adopting Artificial Intelligence instruments. The achievements and the functions of the Indian Judiciary can be categorized as following;¹⁹

(a) Computerization and WAN connectivity: 18,735 courts have been computerized with software interoperability. To reduce connectivity divide, Wide Area Network (WAN) project

¹⁷It is stated by Hon'ble Chief Justice of India, Justice S.A. Bobde, available at <https://www.indialawoffices.com/legal-articles/role-artificial-intelligence-justice-delivery-system>. Last visited on 17/11/2025

¹⁸ The Economic Times, Nov 26, 2019. Available at <https://economictimes.indiatimes.com/archivelist/year-2019,month-11,starttime-43795.cms?from=mdr>. Last visited on 17/11/2025

¹⁹ Available at <https://doj.gov.in/nationalmissions/ecourts-achievements>. Last visited on 17/11/2025.

was given special impetus. 2951 sites (98%) have been commissioned with 10 Mbps to 100 Mbps bandwidth speed and Technically Not Feasible (TNF) sites reduced from 58 in 2019 to 11 in 2021. In the COVID-19 scenario, this WAN connectivity enabled better Video Conferencing facilities and improved access to justice.

(b) COVID Management Software Patch for CIS: To ensure smooth functioning of Courts even during COVID-19 pandemic, a new software patch has been developed to help in smart scheduling of cases. Courts can now hear urgent cases in scheduled time slots and accommodate the convenience of lawyers to prevent conflicting engagements and has proved to be effective in managing overcrowding in court premises.

(c) The National Judicial Data Grid (NJDG)²⁰: Case Information Software using Free and Open Source Software has been developed to automate the Court Registry. This has led to NJDG for judicial data transmission. NJDG is providing world's largest real time online database of more than 19.16 crore cases of various Courts and 15.15 crore orders/judgments. Three new features have been added: (i) Open API to Central and State Government to improve monitoring and compliance of pending cases and (ii) 'Reasons for Delay' column has been added to track delays caused in adjudication,(iii) Land Records Data of 10 States have been linked with NJDG to identify disputed lands.

(d) Virtual Courts: 12 Virtual Courts have been set up in 9 States/UTs which have tried 86 lakh petty traffic offence cases and collected over Rs.175.35 crore online fines. Delhi High Courts has set up 34 Digital Courts to deal with NI Act related cheque bounce cases.

(e) Video Conferencing: Hearing through Video Conferencing (VC) emerged as the mainstay of Courts during the COVID period. India emerged as a global leader with District and High Courts virtually hearing nearly 1.26 crore cases and 96,000 cases by Supreme Court of India. Model Rules for Video Conferencing have been framed by a 5-Member Committee and

²⁰ National Judicial Data Grid (NJDG) is a database of orders, judgments and case details District & Subordinate Courts and High Courts created as an online platform under the e-Courts Project. It provides data relating to judicial proceedings/decisions of all computerized district and subordinate courts of the country. Available at <https://doj.gov.in/the-national-judicial-data-grid-njdg/> visited on 18/11/2025

circulated for adoption by the High Courts. 1500 additional VC licenses procured for use of Courts. Funds released for setting up of 2506 VC cabins and 14,443 additional VC equipment.²¹

(f) **Live Streaming:** Live Streaming of Court proceedings have been started in Gujarat, Karnataka and Orissa High Court. Draft Live Streaming Rules formulated and circulated to all High Courts and placed in the public domain for comments and suggestions.

(g) **E-Filing:** E-Filing is aimed at promoting paperless filing and saving time and cost. The upgraded version 3.0 is being gradually rolled out with advanced features like online submission of Vakalatnama, E-Signing, online video recording of oath, online payment, filing of multiple IAs/application, Portfolio Management and bilingual mode etc.

(h) **E-Sewa Kendra and E-Court Services²²:** 235 E-Sewa Kendras have been funded for roll out in High Courts and District Courts to reduce digital divide. E-Court services have been created to provide real time information on case status, cause list, judgment through 7 platforms like SMS Push and Pull, Email, E-Court Mobile App, Judicial Service Centre and Information.

(i) **Secure, Scalable & Sugamya Website as a Service:** All court websites are being upgraded from the existing system to the S3WAAS platform which are secure, scalable and accessible. Content published on the website is accessible so that even Divyang users will be able to access the information using assistive technologies.

(j) **Digitization of Records:** The E-Committee of the Supreme Court of India had formed a Sub Committee for the formulation of the SOP on Digitization of Records. The SOP has recently been finalized and circulated to the High Courts for their comments.²³

(k) **Judgment Search Portal:** This portal has been created for convenience of stakeholders in searching judgments easily.

(l) **Information, Education & Communication (IEC):** As part of IEC campaign several initiatives have been taken to educate the Judicial Officers, lawyers and public about the facilities available under E-Courts Project, such as

²¹ Available at <https://doj.gov.in/video-conferencing/>. Last visited on 18/11/2025

²² Available at <https://www.pib.gov.in/PressReleaseIframePage.aspx>. Last visited on 18/11/2025

²³ Available at <https://doj.gov.in/digitization-of-records/>. Last visited on 18/11/2025

(i) **E-Committee Website:** Launched exclusively for the e-Committee and linked to the website of the department of justice for dissemination of information relating to e-Courts Project amongst all stakeholders and to enable High Courts to upload their achievements and best practices.

(ii) **Awareness and familiarization of E-filing:** Webinars for Bar Council of Tamil Nadu, Goa, Maharashtra and Delhi were held on 14th June, 2020. Manual and Brochure on e-Filing is made available on e-Filing Portal.

(iii) **YouTube Channel:** Under the title 'e-Courts Services' for video tutorials on e-Filing. 12 help videos in 7 regional languages have been uploaded apart from Hindi and English and circulated for advocates as part of awareness, through e-Filing portal help desk and also on social media through e-Committee YouTube channel.

(iv) **E-Committee Training at National and State level:** Total 30 training and awareness programmes on the ICT conducted between May 2020 and June 2021 covering nearly 2,34,725 stakeholders including Judges of States, Courts staff and Advocates. 25 Master Trainers have been trained in each High Court who in turn has already trained 5409 Master Trainers across the country. These, 5409 Master Trainers have in turn imparted training programme on e-Courts Services and e-filing in each district of the country for advocates in their regional languages and also identified Master Trainer Advocates.

VIII. Artificial Intelligence and Investigation in Indian Criminal Justice System

As far as Artificial Intelligence and Investigation in the Indian Criminal Justice System as India is increasingly exploring AI-driven reforms in policing, forensic science, and judicial processes.

➤ **Role of AI in Criminal Investigation -** AI can analyze large datasets such as crime records, social media, and surveillance feeds to identify crime patterns and predict potential criminal activity. For example, the predictive policing tools like Crime Mapping and Analysis systems used in some Indian states, e.g., Delhi Police's Crime Mapping Analytics and Predictive System.

➤ **Facial Recognition Systems -** Facial recognition is being increasingly used for identifying suspects, locating missing persons, and monitoring large gatherings. For instance, The National Automated Facial

Recognition System (NAFRS) proposed by NCRB aims to link databases from across states and agencies.

➤ Data Analytics and Crime Mapping - AI-driven analytics can integrate multiple databases such as CCTV footage, call records, vehicle registration, and social media to provide investigative leads.

➤ Digital Forensics and Cybercrime - AI tools assist in analyzing digital evidence, decrypting data, and detecting patterns in cybercrimes. For example, the tools like AI-powered malware detection and forensic analysis algorithms used by CERT-In and law enforcement agencies.

➤ Benefits of AI in Criminal Justice- The main benefits by Artificial Intelligence Investigation in Indian Criminal Justice System may be summarized as follows;

- Speed and Efficiency: The Automated data analysis can reduce investigation time drastically.
- Accuracy: The AI minimizes human error and bias in evidence analysis during the process of Investigation.
- Resource Optimization: It helps allocate manpower to critical cases.
- Transparency: Digital trails ensure accountability in police procedures.
- Victim Support: The Chatbots and AI assistants can aid in reporting crimes such as cyberbullying, harassment during the process of Investigation.

IX. Challenges and Ethical Concerns in Artificial Intelligence Investigation

The main challenges by Artificial Intelligence Investigation in Indian Criminal Justice System may be summarized as follows;

- Privacy Issues - Mass surveillance and facial recognition risk violating citizens' privacy rights under Article 21 of the Indian Constitution.
- Bias and Discrimination - AI systems trained on biased data can reinforce social prejudices.
- Legal and Evidentiary Gaps - No clear legal framework for admissibility of AI-generated evidence under the Indian Evidence Act.
- Lack of Technical Expertise - Police forces and judiciary require specialized AI training.
- Cyber security Risks – The main challenges is that AI systems themselves can be hacked or manipulated.

X. Legal and Policy Framework

The below is given the legal and policy framework for the basis of Artificial Intelligence Investigation in Indian Criminal Justice System.

- Information Technology Act, 2000 – governs cybercrimes and digital evidence.
- The Digital Personal Data Protection (DPDP) Act, 2023 – aims to regulate data privacy.
- National Crime Records Bureau (NCRB) – leading AI-based initiatives like NAFRS.
- NITI Aayog's AI for All strategy (2021) – highlights AI in governance, including law enforcement.

XI. Challenges of Artificial Intelligence in Indian law and some important Case Laws -

As discussed earlier that The Indian government has taken initiated already and launched e-courts, and their reach has to increase more to solve the backlog of cases we deal with. During the Covid-19 pandemic, the Supreme Court and High Courts have been able to function online. However there is still various challenges in adopting the Artificial Intelligence in Indian justice delivery system. The legal profession in India is quite manual and traditional and most of the legal professionals are a little hesitant towards the concept of the legal profession in India is quite manual and traditional and most of the legal professionals are a little hesitant towards the new developed technology of artificial intelligence law. The legal professionals are unwilling to use this technology as they are under the impression that this can cause unemployment in the country. The artificial intelligence machine needs an enormous quantity of investment in terms of cash and it is very difficult for each advocate and law firms to afford such kinds of expensive technology based on computerized machine learning. Despite the various challenges the most notable thing is that the current generation of automated risk-assessment tools are more sophisticated than men, a superficial use of these tools will provoke disproportional treatment of individuals, discrimination and unfairness. The Right to Privacy of the individuals is also the most vital challenge regarding the Artificial Intelligence. The Supreme Court in Justice K. S. Puttaswamy (Retd.) and Anr. vs Union Of India And Ors.,²⁴ affirmed the fundamental Right to Privacy. This is a foundational principle that must be respected when AI systems process personal data within the judiciary. The Supreme Court held in para no. 173, "A large number of foreign judgments touching various aspects of accumulation of data, retention of data, surveillance, has been cited by both the parties to support their respective stand. It is necessary to have an over view of the opinion expressed by various Courts in other countries of the world. The present age

being the age of technology and information, the issues pertaining to storage and retention of personal data in different contexts have come up before several Courts of different countries which also need to be noted.²⁵

In the case of Md. Zakir Hussain vs. The State of Manipur & Others,²⁶ “the Manipur High Court used a large language model (Chat GPT) as an experimental research tool to gain a preliminary understanding of the nature and function of the Village Defence Force (VDF). This case is considered a landmark example of AI being used in an Indian judicial process.”²⁷ The court ultimately ruled based on existing laws, finding the petitioner had not been given a fair chance to defend himself. The AI's input was a supplementary tool for understanding the concept, not the basis of the legal judgment.

The Delhi High Court recently allowed the withdrawal of a petition found to contain fabricated case law and non-existent judicial precedents generated by an artificial intelligence tool. The case, Greenopolis Welfare Association (GWA) v. Narender Singh and Ors,²⁸ highlights the necessity of human verification in legal practice.

The Punjab and Haryana High Court first used AI (Chat GPT) in the case of Jaswinder Singh @ Jassi vs. State of Punjab and another²⁹, Justice Anoop Chitkara's bench referenced the AI chatbot's response while deciding the bail plea of the accused, Jaswinder Singh, who was involved in a brutal assault that resulted in an individual's death. The court ultimately denied the bail application, noting the severity and cruelty of the crime and the accused's prior criminal

²⁴ W.P.(C) No. 494/2012

²⁵ Ibid

²⁶ WP(C) No. 70/2023

²⁷ Ibid

²⁸ CM(M) 1909/2025, CM APPL. 61372/2025.

²⁹ Criminal Miscellaneous Petition no. 22496-2022

history. The judge clarified that the AI's input was used solely to present a broader, worldwide perspective on bail jurisprudence in cases involving cruelty, and not as a decisive factor in the specific legal or factual issues of the case. In July 2025, the Kerala High Court issued India's first formal policy, "Policy Regarding Use of Artificial Intelligence Tools in District Judiciary", for its district courts, allowing AI for administrative tasks (like case listing, translation, transcription) but strictly banning its use for making legal findings, orders, or judgments, emphasizing human oversight, mandatory training, detailed usage logs, and accountability for any errors, setting national guidelines to balance efficiency with judicial integrity.³⁰

In the landmark case Arjit Singh v. Codible Ventures LLP³¹, ruling by the Bombay High Court, where the singer successfully defended his personality rights (name, voice, image, likeness) against unauthorized commercial use, especially by AI voice cloning and merchandise platforms, setting a crucial precedent for celebrity rights in the digital age by protecting against AI-driven misuse. The court issued an injunction, preventing entities from using his persona without consent, highlighting the need for legal frameworks to manage technological advancements like AI. The recent judgment delivered by the Delhi High Court in favour of actor Anil Kapoor³² invites a moment of reflection on the intricate interplay between technology, individual rights, and the law. Presided over by Justice Prathiba M. Singh, the decision raises profound questions about how we, as a society, navigate the promises and perils of artificial intelligence, particularly in a world where personal image and identity are increasingly vulnerable to exploitation. It is considered significant because it marks one of the earliest explicit recognitions by an Indian court of the risks posed by AI-generated deep fakes / digital impersonation for personality rights. The court observed misuse of AI tools to create unauthorized deep fakes and misuse of a public figure's persona.

XII. Recommendations for using AI within the Indian Criminal Justice System

The proposed recommendations for developing a robust and ethical AI ecosystem within the Indian criminal justice framework are following;

³⁰ Available at <https://www.ndtv.com/india-news/kerala-high-court-bans-use-of-ai-tools-in-judicial-decision-making-8911028>. Last visited on 02/12/2025

³¹ COM. IPR SUIT (L) NO.23443 OF 2024,

³² Anil Kapoor v. Simply Life India & Ors., Manu/Deor/248558/2023.

1. **Human rights and rule-of-law first** - Every AI deployment must preserve constitutional rights (fair trial, life & liberty, privacy, equality) and not replace judicial or core investigative judgment.
2. **Training & capability building:** legal officers, judges, investigating officers and data protection officers should get short, standardized modules on AI limitations, hallucinations, and evidence handling.
3. **Risk-based governance** - Treat AI used for investigations, predictive policing, face recognition, or risk scoring as high or unacceptable risk and subject it to stronger controls.
4. **Data protection & purpose limitation:** Personal data used must comply with India's the Digital Personal Data Protection (DPDP) Act, 2023 and along with the more recent DPDP Rules, 2025, principles (lawful basis, minimality, retention limits, special protections for children, sensitive data rules)
5. **Transparency, accountability, and auditability:** Decisions affecting liberty must be explainable, logged and auditable by independent bodies.
6. **Statutory framework or sectorial rules for AI in law enforcement:** specific rules that require explainability, ban profiling that predicts criminal propensity, set standards for face recognition and define penalties for misuse. Use the EU approach as a model for prohibited AI practices.

XIII. Conclusion

The emerging of Artificial Intelligence is a relevant aspect in our society and certainly, the impact of in the justice system cannot be avoided. The new concept of AI has been brought up for consideration to restore the effectiveness and efficiency of Indian Justice Delivery System. With the spreading trends in the world of digitalization, this computer science based machine learning may help to reduce the number of pending cases. Artificial Intelligence is supposed to be perceived as more reliable, scientific and legitimate than other sources. There is no doubt that this technique would be used to obtain desired success in speedy and effective Justice delivery system but at the same time it should be used with great caution and the responsibilities should neither be delegated to the machine and nor think about replacement of judges, because there are many factors that have an impact on judicial decision making.

AI has the ability to completely change India's criminal justice system. It can improve the effectiveness of investigations and increase access to justice if it is incorporated appropriately with protections for privacy, justice, and accountability. However, the employment of AI that is uncontrolled or biased may result in grave human rights breaches. India's strategy must so strike a balance between ethical governance and technological growth.

On the basis of above study it can be concluded that India needs a defined legal framework for the use of AI in law enforcement, and there should be comprehensive AI legislation. Regular AI training for law enforcement and judicial personnel is also necessary to increase capacity. The ethical standards are also necessary to guarantee accountability, openness, and equity. Raising public awareness of data rights and AI spying should be a top priority. There should be formed the human and AI collaboration and it should support, not replace, human decision-making.

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