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“ARTIFICIAL INTELLIGENCE AND CRIMINAL JUSTICE IN INDIA: RECONCILING TECHNOLOGICAL INNOVATION WITH CONSTITUTIONAL FAIRNESS”

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ABSTRACT

Artificial Intelligence (AI) is increasingly being used in criminal justice for predictive policing, facial recognition, forensic analysis, digital evidence processing and legal research. While these applications may improve efficiency and assist decision-making, they also raise serious concerns regarding privacy, algorithmic bias, transparency, accountability and the right to a fair trial. This paper examines the constitutional and legal implications of AI in India's criminal justice system, particularly in relation to Articles 14, 20(3) and 21 of the Constitution, the Bharatiya Nagarik Suraksha Sanhita, 2023 and the Bharatiya Sakshya Adhiniyam, 2023. Adopting a doctrinal and analytical approach, the study evaluates whether the existing legal framework adequately addresses the risks associated with AI-assisted criminal justice. It argues that AI-generated predictions and assessments should remain subject to independent verification, judicial scrutiny and meaningful human oversight. The paper proposes a rights-based approach that balances technological innovation with constitutional fairness, accountability and protection of individual rights.

Keywords: Artificial Intelligence; Criminal Justice; Constitutional Rights; Fair Trial; Privacy; Digital Evidence.

1. INTRODUCTION

The question is no longer whether Artificial Intelligence (AI) will enter the criminal justice system, but whether its use can be reconciled with constitutional guarantees of liberty, equality and fair trial. AI is increasingly influencing the way criminal justice is investigated and administered. Technologies such as facial recognition, predictive policing, digital evidence analysis, forensic applications and AI-assisted legal research can help police officers, forensic experts, lawyers and courts process large volumes of information. These developments have the potential to improve investigative efficiency and assist institutions that continue to face

increasing caseloads, delays and limited resources.

However, criminal justice is not merely concerned with efficiency. It involves the exercise of State power in circumstances where decisions may directly affect an individual's liberty, dignity, privacy and reputation. An inaccurate or biased AI system may therefore have consequences far more serious than an ordinary technological error. Concerns relating to algorithmic bias, privacy, transparency, reliability and accountability become particularly significant when AI is used to identify suspects, analyse evidence or support legal decision-making.

The issue has gained greater importance with India's changing criminal law framework. The Bharatiya Nagarik Suraksha Sanhita, 2023 and the Bharatiya Sakshya Adhiniyam, 2023 recognise the increasing significance of technology and electronic evidence in criminal proceedings. Nevertheless, technological advancement must operate within constitutional boundaries. The principles of equality, personal liberty, privacy, protection against self-incrimination and fair trial cannot be compromised in the pursuit of technological efficiency. Against this background, this article critically examines the emerging role of AI in India's criminal justice system, identifies the legal and constitutional challenges associated with its use, and proposes a rights-based framework founded on transparency, accountability and meaningful human oversight.

1.1 RESEARCH PROBLEM

Artificial Intelligence is developing rapidly and is increasingly being used to support criminal investigation and justice administration. Technologies such as facial recognition, predictive policing, forensic analysis and digital evidence processing may improve efficiency, but they also raise concerns about accuracy, algorithmic bias, privacy, transparency and accountability. These concerns become more serious when AI-assisted decisions may affect a person's liberty, dignity and right to a fair trial. Although the BNSS, 2023 and the Bharatiya Sakshya Adhiniyam, 2023 recognise the growing role of technology in criminal proceedings, India does not yet have a comprehensive legal framework specifically regulating AI in criminal justice. This study therefore examines whether the existing legal and constitutional safeguards are adequate to ensure that the use of AI does not compromise fundamental rights and fair trial guarantees.

1.2 RESEARCH GAP

Existing Indian studies have discussed AI in relation to privacy, data protection, digital evidence and judicial administration. However, limited attention has been given to how AI-assisted criminal justice may affect the constitutional right to a fair trial. In particular, issues such as algorithmic bias, lack of transparency, technological errors and inadequate human oversight require further legal analysis. This study addresses this gap by examining the use of AI in criminal justice from the perspective of equality, privacy, personal liberty and fair trial rights.

1.3. RESEARCH OBJECTIVES

1. To examine the emerging applications of Artificial Intelligence in India's criminal justice system and the legal challenges arising from its use.
2. To analyse the impact of AI on fundamental rights, particularly privacy, equality, personal liberty and the right to a fair trial.
3. To suggest a rights-based framework for the responsible use of AI, ensuring transparency, accountability and effective human oversight.

1.4. RESEARCH QUESTIONS

1. How is Artificial Intelligence being used in India's criminal justice system, and what legal challenges does it create?
2. How does the use of AI affect fundamental rights, particularly privacy, equality and the right to a fair trial?
3. What legal safeguards are necessary to ensure the responsible and accountable use of AI in criminal justice?

1.5. REVIEW OF LITERATURE

The existing literature on Artificial Intelligence and law shows that AI has significant potential to transform the administration of justice, while also creating concerns regarding fundamental rights and accountability. Scholars have examined AI from different perspectives, including privacy, surveillance, algorithmic bias, digital evidence and judicial decision-making.

1. Shoshana Zuboff's work on surveillance and data-driven technologies provides another important perspective on the relationship between technological development and

individual autonomy. Her analysis of large-scale collection and use of personal data is particularly relevant to AI-based surveillance, facial recognition and biometric technologies¹.

2. In the Indian constitutional context, the Supreme Court's decision in *Justice K.S. Puttaswamy (Retd.) v. Union of India* provides an important foundation for examining the privacy implications of AI. The recognition of privacy as a constitutionally protected right has significant implications for the collection, processing and use of personal data through AI systems².
3. Institutional literature has also contributed to the discussion. NITI Aayog's *Responsible AI* framework identifies principles including safety and reliability, equality, non-discrimination, privacy, transparency and accountability³.
4. The Supreme Court of India has further examined the opportunities and risks associated with AI through its *White Paper on Artificial Intelligence and Judiciary*, reflecting the judiciary's growing engagement with responsible AI use⁴.

However, existing literature generally addresses AI, privacy, data protection, digital evidence and judicial administration as separate areas. There remains a need for focused legal research on the **use of AI in criminal justice and its impact on the constitutional right to a fair trial**. In particular, questions concerning algorithmic bias, transparency, reliability and human oversight require further examination from the perspective of accused persons. This study seeks to address this gap by analysing AI-assisted criminal justice within the broader framework of equality, privacy, personal liberty, accountability and fair trial.

1.6. RESEARCH METHODOLOGY

The study adopts a **doctrinal and analytical legal research methodology**. It examines the Constitution, BNSS, 2023, Bharatiya Sakshya Adhiniyam, 2023, Digital Personal Data Protection Act, 2023, judicial decisions, government reports and relevant academic literature. The study analyses AI-related concerns such as privacy, bias, transparency, accountability and fair trial, and proposes safeguards for its responsible use in criminal justice.

¹Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* 8 (PublicAffairs 2019).

²Justice K.S Puttaswamy(Retd.) vs Union of India AIR 2017 10 SC 4161

³NITI Aayog, *Responsible AI: Approach Document for India – Part 1: Principles for Responsible AI* 4-5(2021)

⁴Supreme Court of India, *White Paper on Artificial Intelligence and Judiciary* (Nov. 2025)

2. UNDERSTANDING ARTIFICIAL INTELLIGENCE IN CRIMINAL JUSTICE

2.1 Meaning, Nature and Applications of Artificial Intelligence in Criminal Justice

Artificial Intelligence (AI) refers to machine-based systems capable of processing information and producing outputs such as predictions, recommendations or decisions. AI systems can analyse large volumes of data, recognise patterns and perform tasks that would traditionally require human involvement⁵. Technologies such as machine learning, natural language processing, computer vision and predictive analytics have increased the practical use of AI across different sectors.

In criminal justice, AI can assist at several stages of the process. Law-enforcement agencies may use AI for crime-pattern analysis, facial recognition, identification of suspects and examination of digital information. It can also support forensic analysis by processing large quantities of data and identifying patterns that may assist investigators. In legal practice, AI-based tools may assist lawyers and courts with legal research and administrative tasks. The potential value of these applications lies mainly in their ability to process information quickly and assist human decision-makers. NITI Aayog has recognised the potential of AI while emphasising principles such as safety, equality, non-discrimination, privacy, transparency and accountability⁶.

2.2 AI-Assisted Decision-Making, Human Oversight and Opportunities

A significant distinction must be made between **AI-assisted decision-making** and **automated decision-making**. In an AI-assisted process, the system provides information, analysis or recommendations, while the final decision remains with a human authority. In automated decision-making, the system may determine an outcome with little or no meaningful human intervention. This distinction is particularly important in criminal justice because decisions affecting arrest, investigation, prosecution, bail and personal liberty involve legal judgment and constitutional responsibility. AI should therefore support, rather than replace, human decision-making.

The use of AI can improve the efficiency of criminal justice institutions by helping analyse large datasets, identify patterns, examine digital evidence and support forensic investigation. It may also assist courts and legal professionals in managing increasing

⁵Organisation for Economic Co-operation and Development, *Explanatory Memorandum on the Updated OECD Definition of an AI System*, OECD Artificial Intelligence Papers No. 8, at 6 (2024).

⁶Supra note 3

workloads. However, technological efficiency cannot by itself justify reliance on AI. Inaccurate data, biased algorithms, lack of transparency and excessive dependence on automated outputs may adversely affect individuals. The Supreme Court of India has recognised the growing importance of AI in the judicial system and the need for its responsible use⁷. Therefore, AI should be treated as an assistive technological tool, subject to meaningful human oversight, legal accountability and constitutional safeguards.

3. EMERGING APPLICATIONS OF AI IN INDIA'S CRIMINAL JUSTICE SYSTEM

Artificial Intelligence is no longer limited to theoretical discussions. It is increasingly being explored as a tool for policing, criminal investigation, forensic examination, evidence management and judicial administration. Its ability to analyse large amounts of information in a short time can make criminal justice processes more efficient. At the same time, technology cannot be treated as neutral simply because it operates through algorithms. Its use may create concerns relating to privacy, bias, accuracy, transparency and accountability.

3.1 AI in Predictive Policing

Predictive policing uses crime data to identify patterns and areas where criminal activity may be more likely to occur. This can help the police use their resources more effectively and focus attention where it may be needed. However, the quality of an AI prediction depends largely on the data used to produce it. If past policing practices were biased, the same bias may be repeated through the algorithm. This could result in certain communities being subjected to increased surveillance without sufficient individualised justification. Such concerns have implications for the constitutional guarantee of equality under Article 14. NITI Aayog has accordingly recognised equality, inclusiveness and non-discrimination as important principles of responsible AI⁸.

3.2 Facial Recognition Technology

Facial recognition can assist the police in identifying suspects, missing persons or individuals captured in surveillance footage. It may save considerable time where investigators have to examine large numbers of images. However, even a small error in identification can have serious consequences when the technology is used in criminal investigation. Facial

⁷Supra note 4

⁸Supra note 3

recognition also involves the collection and processing of personal information. The Supreme Court's decision in *Justice K.S. Puttaswamy (Retd.) v. Union of India*⁹ provides an important constitutional basis for examining such practices, particularly in relation to privacy, dignity and personal liberty. Therefore, the convenience offered by facial recognition must be balanced against the individual's right to privacy.

3.3 AI-Assisted Criminal Investigation

AI can help investigators examine CCTV footage, financial transactions, call records, digital communications and other large datasets. It can reveal connections and patterns that may be difficult to identify manually. However, an algorithm can only assist an investigation; it cannot determine guilt. An AI-generated prediction or identification must be independently verified through reliable evidence. Otherwise, investigators may begin to rely on technological predictions rather than objective evidence, creating a risk of prejudice against the accused.

3.4 AI in Forensic Analysis

AI can also support forensic work by assisting in the examination of fingerprints, images, audio, DNA-related information and other forms of evidence. Its ability to compare large datasets may make forensic examination faster and more consistent. Yet the output of an AI system should not automatically be treated as conclusive. The methodology, accuracy and limitations of the technology must remain open to expert and judicial scrutiny. An accused person must also have a meaningful opportunity to question evidence that has been generated or analysed with the assistance of AI.

3.5 AI and Digital Evidence

Modern criminal investigations often involve enormous quantities of electronic information. AI can help investigators identify relevant messages, documents, images and other digital material from such datasets. However, the use of AI to process digital information does not by itself establish its authenticity or admissibility. Electronic records must continue to satisfy the requirements of the Bharatiya Sakshya Adhiniyam, 2023¹⁰. In *Anvar P.V. v. P.K. Basheer*¹¹, the Supreme Court emphasised the statutory requirements governing electronic evidence, and these principles were subsequently considered and clarified in *Arjun Panditrao*

⁹Supra note 2

¹⁰Bharatiya Sakshya Adhiniyam, 2023, Sec 61-63, No. 47 of 2023.

¹¹Anvar P.V vs. P.K.Basheer(2014)10 SCC 473.

*Khotkar v. Kailash Kushanrao Gorantyal*¹². Thus, AI may assist in analysing evidence, but it cannot replace the legal requirements governing its proof.

3.6 AI-Assisted Legal Research and Judicial Administration

AI can make legal research and judicial administration more efficient by helping lawyers and judges locate authorities, organise case materials, summarise documents and perform routine tasks. The Supreme Court has recognised the growing importance of AI in the judicial system through its *White Paper on Artificial Intelligence and Judiciary*¹³.

However, AI-generated legal material cannot simply be accepted without verification. Incorrect or fabricated authorities may appear convincing when presented in a technologically sophisticated format. The Supreme Court's decision in *Pooja Ramesh Singh v. Jammu & Kashmir Bank Ltd*¹⁴, illustrates the need for caution when AI-generated legal material is relied upon. Ultimately, AI should assist legal professionals rather than replace their judgment. The responsibility for verifying evidence, applying the law and making judicial decisions must remain with human decision-makers.

4. CONSTITUTIONAL CHALLENGES OF AI IN CRIMINAL JUSTICE

The use of Artificial Intelligence in criminal justice must remain within constitutional limits. Although AI can improve investigation and evidence analysis, its use may affect equality, privacy, personal liberty, protection against self-incrimination and the right to a fair trial. The central issue is whether technological efficiency can be achieved without weakening constitutional protections.

4.1 Article 14: Equality and Algorithmic Discrimination

AI systems depend on data, and biased or incomplete data can produce biased outcomes. In predictive policing, historical patterns of policing may cause certain areas or communities to be repeatedly identified as high-risk. Facial-recognition errors may similarly result in unequal treatment or wrongful suspicion. Such outcomes raise concerns under Article 14, which protects equality before the law¹⁵. AI systems used by State authorities should therefore be tested for discriminatory outcomes, with human review of decisions affecting individual rights.

¹²Arjun Panditrao Khotkar vs. Kailash kushanrao Gorantyal (2020) 7 SCC 1.

¹³Supra note 4

¹⁴Pooja Ramesh Singh v. Jammu & Kashmir Bank Ltd.,2026 INSC (India July 2,2026).

¹⁵Shayara Bano v. Union of India,(2017) 9 SCC 1, 99-100

4.2 Article 21: Privacy and Personal Liberty

AI-based surveillance, facial recognition and biometric technologies involve the collection and analysis of personal information. In *Justice K.S. Puttaswamy (Retd.) v. Union of India*, the Supreme Court recognised privacy as a fundamental right closely connected with dignity and personal liberty¹⁶. Any State interference with privacy must satisfy the requirements of legality, legitimate purpose and proportionality¹⁷. Therefore, AI surveillance should be limited to what is necessary and justified, with appropriate safeguards concerning data collection, retention and use.

4.3 Article 20(3): Protection Against Self-Incrimination

AI-assisted interrogation and behavioural technologies may raise concerns under Article 20(3), which protects an accused against compelled self-incrimination. In *Selvi v. State of Karnataka*, the Supreme Court held that the involuntary use of techniques such as narco-analysis, polygraph examination and BEAP testing violates the protection against testimonial compulsion and also affects personal liberty under Article 21¹⁸. This principle is relevant to emerging technologies that seek to obtain or infer information from an individual's mind or body. Technological advancement cannot justify compelled extraction of personal information.

4.4 Presumption of Innocence: Prediction Is Not Proof

AI may identify individuals as potential suspects based on statistical patterns, associations or behavioural data. However, **prediction is not suspicion, suspicion is not proof, and proof is not guilt unless established according to law**. The presumption of innocence requires the prosecution to establish criminal liability through legally recognised evidence¹⁹. An AI-generated risk score may assist investigation, but it cannot itself establish guilt. Criminal justice must therefore remain based on proven conduct rather than predicted behaviour.

4.5 Right to Fair Trial and Human Decision-Making

The right to a fair trial requires an accused to have a meaningful opportunity to understand and challenge the case against them. In *Zahira Habibullah Sheikh v. State of Gujarat*, the Supreme Court emphasised the importance of fairness and a genuine opportunity

¹⁶Supra note 2

¹⁷Id at 325- 26

¹⁸Selvi v. State of Karnataka (2010) 7 SCC 263

¹⁹State of Rajasthan v. Kashi Ram (2006)12 SCC 254

to defend oneself²⁰. This principle becomes particularly important when AI contributes to investigation or evidence assessment. If an AI system influences a decision, the accused should have sufficient information to question its reliability and relevance.

Complete disclosure of complex algorithms may not always be necessary, but **meaningful transparency and human oversight are essential**. AI should assist police officers, prosecutors and judges, not replace their legal responsibility. The constitutional legitimacy of AI in criminal justice ultimately depends on preserving equality, privacy, liberty, the presumption of innocence and the right to a fair trial.

5. AI, BNSS AND BHARATIYA SAKSHYA ADHINIYAM

The increasing use of Artificial Intelligence in criminal investigation creates an important question for Indian evidence law: **can an AI-generated conclusion itself be treated as evidence, or should it remain only an investigative aid?** The Bharatiya Nagarik Suraksha Sanhita, 2023 (“BNSS”) and the Bharatiya Sakshya Adhiniyam, 2023 (“BSA”) recognise the growing importance of technology and electronic records, but neither creates a separate category of automatically admissible “AI evidence.” AI-generated material must therefore be examined through existing principles of relevance, authenticity, reliability and fair procedure.

5.1 AI and Criminal Investigation under BNSS

The BNSS incorporates technology into criminal investigation and procedure, including the use of electronic communication and electronic modes in various stages of criminal proceedings²¹. These provisions can facilitate technology-assisted investigation, including the collection and analysis of digital information. AI may help investigators examine CCTV footage, communications, financial records and other large datasets. However, the fact that an investigative tool is technologically advanced does not make its output conclusive. An AI-generated identification, prediction or risk assessment should ordinarily be treated as an investigative lead requiring independent verification. The investigating officer must still establish the relevant facts through legally recognised evidence.

5.2 Electronic and Digital Evidence under BSA

The BSA gives statutory recognition to electronic and digital records as evidence.

²⁰Zahira Habibullah Sheikh v. State of Gujarat(2004) 4 SCC 158

²¹Bharatiya Nagarik Suraksha Sanhita, No.46 of 2023

Sections 61–63 establish the framework governing electronic records and their admissibility²². This is significant because modern criminal cases increasingly depend upon digital material such as messages, emails, CCTV recordings, computer records and other electronically stored information. AI may assist in locating, organising or analysing such material, but the underlying electronic record must still satisfy the applicable statutory requirements. AI processing cannot by itself remove the need to establish the authenticity and integrity of the electronic record.

5.3 Authentication and Reliability

Authentication is particularly important where AI is used to analyse or interpret evidence. The court must be able to determine what the original material was, how it was collected, whether it was altered and whether the AI system produced a reliable output. Questions may also arise regarding the accuracy of the algorithm, the quality of the training data and the possibility of error. The Supreme Court's decisions in *Anvar P.V. v. P.K. Basheer*²³ and *Arjun Panditrao Khotkar v. Kailash Kushanrao Gorantyal*²⁴ demonstrate the importance of statutory safeguards governing electronic evidence. These principles remain relevant where AI is used to process digital material.

5.4 AI-Generated or AI-Processed Evidence

A distinction should be drawn between **AI-processed evidence** and **AI-generated conclusions**. If AI is used to search or organise an existing CCTV recording, document or database, the underlying material remains the primary evidentiary source. The AI output may assist the court in understanding or locating relevant material. A different situation arises when an AI system generates a prediction, identification or assessment based on available data. Such an output should not automatically be treated as independent proof of guilt. Its evidentiary value depends upon the reliability of the underlying data, methodology, accuracy and possibility of independent verification.

5.5 Evidentiary Challenges

The central evidentiary challenge is therefore whether the accused can effectively question AI-assisted material. If the operation of an AI system is opaque, the defence may face

²²Bharatiya Sakshya Adhiniyam, No. 47 of 2023, Sec 61-63.

²³*Anvar P.V v. P.K. Basheer* (2014) 10 SCC 473, 487-88.

²⁴*Arjun Panditrao Khotkar v. Kailash Kushanrao Gorantyal* (2020) 7 SCC 1, 23-24.

difficulty in examining its accuracy, identifying errors or challenging its conclusions. This directly affects the fairness of criminal proceedings.

Accordingly, **AI should primarily function as an investigative and analytical aid, rather than as an autonomous source of proof.** Where AI-generated material is relied upon, courts should require adequate disclosure regarding its source, methodology and limitations, together with independent human verification. The final assessment of guilt must remain based on legally admissible evidence and judicial reasoning, not merely on the authority of an algorithm.

6. PROPOSED FRAMEWORK FOR RESPONSIBLE AI IN CRIMINAL JUSTICE

The use of Artificial Intelligence in criminal justice should not be driven only by technological efficiency. When technology is used by the State, it can directly affect a person's liberty, privacy and reputation. India therefore needs a rights-based approach in which AI supports criminal justice without weakening constitutional safeguards. The following framework is proposed to ensure that the use of AI remains lawful, fair and accountable.

6.1 Legality, Necessity and Proportionality

Every significant use of AI in criminal justice should have a clear legal basis. Police or other authorities should not rely on intrusive AI systems merely because the technology is available. Its use should be genuinely necessary for a legitimate investigative or judicial purpose. Further, the interference with individual rights must be proportionate to the objective being pursued. This is particularly important for facial recognition, biometric surveillance and predictive policing, where technological convenience may otherwise become a justification for excessive State intrusion.

6.2 Meaningful Human Oversight

AI should assist human decision-makers rather than replace them. No person should be arrested, prosecuted, convicted or punished solely because an algorithm identifies them as a potential offender. Police officers, prosecutors and judges must independently evaluate AI-generated information and remain responsible for the final decision. Human oversight should be real and meaningful, rather than merely a formal approval of an algorithmic recommendation.

6.3 Transparency, Explainability and Right to Challenge

A person affected by an AI-assisted decision should know that AI was used and should receive sufficient information to understand how it influenced the decision. Complete disclosure of complex source code may not always be necessary, but secrecy should not prevent an accused from challenging evidence relied upon against them. AI-assisted conclusions should therefore be capable of meaningful examination by the defence, experts and courts. An effective mechanism should also be available to challenge inaccurate or unfair AI-generated outcomes.

6.4 Independent Auditing, Accuracy and Non-Discrimination

High-risk AI systems used in criminal justice should be independently tested and regularly audited. Such audits should examine accuracy, reliability, discriminatory outcomes and the quality of the data used by the system. Particular attention should be given to predictive policing and facial recognition because errors in these areas can directly affect individuals who have not been convicted of any offence. Where a system repeatedly produces unreliable or discriminatory results, its use should be suspended until the problem is addressed.

6.5 Data Protection and Accountability

AI systems require large amounts of information, but the collection of personal data should not become unlimited simply because it may be technologically useful. Data should be collected for a legitimate purpose, used only to the extent necessary and protected against unauthorised access or misuse. Clear responsibility should also exist for errors caused by AI-assisted systems. Ultimately, technology cannot be allowed to become a shield behind which State authorities avoid responsibility. The institution using AI must remain accountable for the consequences of its use.

A responsible AI framework should therefore follow a simple principle: **AI may assist the administration of criminal justice, but constitutional rights must remain the final safeguard.** Efficiency should strengthen justice, not come at the cost of liberty, equality and fair trial.

7. RECENT INDIAN JUDICIAL AND POLICY DEVELOPMENTS

India's approach to Artificial Intelligence is gradually moving from general discussions about technological innovation towards questions of responsibility, accountability and human oversight. Recent developments in the Supreme Court, NITI Aayog and the data-protection

framework show that India is beginning to address the legal consequences of AI. These developments are particularly relevant to criminal justice, where technological decisions may directly affect liberty and fair trial rights.

7.1 Supreme Court and Artificial Intelligence

A significant recent development is the Supreme Court's decision in *Pooja Ramesh Singh v. Jammu & Kashmir Bank Ltd.*,²⁵. The Court dealt with judgments of the NCLT and NCLAT that relied on non-existent and AI-generated case authorities. The Supreme Court set aside those decisions and stressed that AI may be used to assist adjudication, but human beings must retain control over the judicial process. The Court also directed the Bar Council of India to address the problem of reliance on AI-generated false authorities. This decision is important because it demonstrates that technological assistance does not reduce the responsibility of judges and lawyers to verify legal material.

7.2 Supreme Court White Paper on AI and Judiciary

The Supreme Court's *White Paper on Artificial Intelligence and Judiciary*,²⁶ published in November 2025, represents an important institutional development. The Court has recognised both the potential of AI to support judicial functioning and the need for safeguards against its misuse. The White Paper provides an important foundation for discussions concerning responsible AI, human oversight and the appropriate limits of technological assistance in adjudication.

7.3 NITI Aayog's Responsible AI Framework

NITI Aayog's *Responsible AI: Approach Document for India—Part 1*²⁷ identifies principles including safety and reliability, equality, inclusiveness and non-discrimination, privacy and security, transparency, accountability and protection of human values. Its second part focuses on operationalising these principles. Although these documents are not criminal-justice legislation, they provide a useful policy foundation for developing safeguards for high-risk AI applications.

7.4 Digital Personal Data Protection Framework

The Digital Personal Data Protection Act, 2023 and the Digital Personal Data

²⁵ Supra note 14

²⁶ Supra note 4

²⁷ Supra note 3

Protection Rules, 2025 are relevant to AI because AI systems often depend upon the collection and processing of personal data. The 2025 Rules, notified by the Ministry of Electronics and Information Technology, provide the operational framework for implementing the data-protection regime and establish an enforcement structure including the Data Protection Board of India²⁸. For criminal justice, however, data protection must be considered alongside legitimate investigative requirements and constitutional rights.

7.5 Emerging AI Governance in India

These developments indicate that India's AI governance is gradually moving towards a model based on responsible innovation rather than unrestricted technological adoption. However, a significant gap remains: there is still no comprehensive AI-specific legal framework dealing with the particular risks of high-risk criminal justice applications such as predictive policing, facial recognition and AI-assisted evidentiary analysis.

The recent Supreme Court approach provides an important guiding principle: AI may assist human decision-making, but it cannot displace human responsibility. For criminal justice, this principle should be strengthened through specific safeguards concerning transparency, accountability, independent auditing, human oversight and the right to challenge AI-assisted decisions.

8. FINDINGS

The study finds that Artificial Intelligence can improve the efficiency of India's criminal justice system by assisting investigation, forensic analysis, digital evidence management and legal research. However, its benefits must remain subject to constitutional safeguards. The use of AI also creates concerns relating to **privacy, equality, personal liberty, algorithmic bias, presumption of innocence and fair trial**. Opaque or inaccurate AI systems may make it difficult for an accused person to understand and challenge an AI-assisted conclusion.

The existing framework under the **Constitution, BNSS, 2023 and Bharatiya Sakshya Adhiniyam, 2023** provides certain safeguards, but does not comprehensively regulate AI in criminal justice. Clearer rules are required regarding transparency, accountability, auditing and the rights of persons affected by AI-assisted decisions. The study further finds that **AI-generated predictions cannot be treated as equivalent to legally**

²⁸ Digital Personal Data Protection Rules, 2025, Ministry of Electronics & Information Technology (Nov. 14, 2025)

established evidence. Such outputs require independent verification and judicial scrutiny. Human oversight must therefore remain central to criminal justice decision-making.

Finally, India needs a **rights-based framework for high-risk AI**, based on legality, necessity, proportionality, transparency, non-discrimination, data protection and the right to challenge AI-assisted decisions. AI should support justice institutions without replacing human judgment or constitutional accountability.

9. RECOMMENDATIONS

9.1 Develop an AI-Specific Legal Framework

India should establish clear legal safeguards governing the use of AI in criminal investigation, evidence analysis and judicial administration. High-risk applications such as facial recognition, predictive policing and AI-based risk assessment should be subject to specific legal standards.

9.2 Ensure Mandatory Human Oversight

AI should remain an assistive tool and should not independently determine arrest, prosecution, conviction or punishment. Every significant AI-assisted decision should be reviewed by a responsible human authority who remains legally accountable for the final decision.

9.3 Introduce Independent Algorithmic Audits

High-risk AI systems should undergo regular independent audits to examine accuracy, reliability, bias, security and discriminatory outcomes. Systems producing serious or repeated errors should be reviewed, corrected or suspended.

9.4 Strengthen Transparency and Defence Rights

Where AI-assisted material is relied upon against an accused, the defence should receive sufficient information to understand and challenge its relevance and reliability. Courts should be able to require disclosure and independent verification where necessary to protect the right to a fair trial.

9.5 Build Technological Capacity in the Justice System

Judges, prosecutors, defence lawyers, police officers and legal-aid authorities should

receive specialised training in AI, algorithmic bias, digital evidence and the limitations of AI-generated outputs. This will enable legal professionals to use technology critically rather than relying on it unquestioningly.

9.6 Establish a Right to Challenge AI-Assisted Decisions

Individuals affected by AI-assisted criminal justice decisions should have an effective mechanism to challenge those decisions. Courts should have the power to examine the reliability, methodology and evidentiary value of AI-generated outputs. Above all, **AI-generated predictions should never be treated as a substitute for legally established evidence or human judicial reasoning.**

10. CONCLUSION

Artificial Intelligence can make India's criminal justice system more efficient by assisting investigation, forensic analysis, evidence management and judicial administration. However, criminal justice is ultimately about human liberty, dignity and fairness, which cannot be reduced to algorithmic decisions. The study shows that AI may create constitutional concerns under **Articles 14, 20(3) and 21**, particularly through algorithmic bias, surveillance, facial recognition and AI-assisted interrogation. Predictive technologies also raise concerns about the presumption of innocence. **Prediction is not proof, and suspicion cannot replace legally established evidence.**

Although the Constitution, BNSS, 2023 and Bharatiya Sakshya Adhiniyam, 2023 provide important safeguards, India still needs clearer rules specifically addressing AI-related risks. Greater transparency, accountability, human oversight, independent auditing and effective mechanisms to challenge AI-assisted decisions are necessary. The central issue is therefore not whether AI should be used in criminal justice, but **how it can be used without compromising constitutional rights**. AI should assist investigators, lawyers and courts while final responsibility remains with accountable human decision-makers.

Ultimately, **AI should modernise criminal justice, not mechanise it**. Technological efficiency can strengthen justice only when it operates within the limits of constitutional fairness.