

Balancing Personal Liberty and Technology: The Role of Artificial Intelligence in Arrest, Bail, and Detention under Indian Criminal Law

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ABSTRACT

As a result of the developing role of Artificial Intelligence (AI), more attention is now being paid to the use of evidence, testimony and fact-finding in relation to a fair trial. The implementation of AI tools for arrest, bail and detention are being explored to improve the efficiency of the criminal justice system in India. The study at hand looks into the application of AI in Criminal Justice and Protection of Personal Liberty as per the Indian Criminal Law. Moreover, it delves into how AI development in the criminal justice sector has posed challenges. This is done using the qualitative doctrinal research method, drawing upon analysis of several journal articles, legal materials, judicial pronouncements, policy reports and statutory provisions. AI can be used to enhance case management, predictive analysis and decision support, and legal research, among other uses. Introduction and investigation of novel scientific evidence. Evidence management and expert testimony use found to be beneficial in charge. Contrary to that, the algorithms were analyzed for bias, and a significant emphasis was placed on this by the UN. Moreover, algorithms impact the accused individuals directly based on gender, class, religion, race and geographical location. Additionally, privacy, transparency and due process concerns are raised. This use, too, conflicts with the law and with constitutional morality.

Keywords: Artificial Intelligence, Personal Liberty, Arrest, Bail, Detention, Criminal Justice System, Indian Criminal Law, Due Process, Algorithmic Bias, Judicial Decision-Making.

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Introduction

The legal implications of Artificial Intelligence are perhaps the most significant of the 21st century. Law enforcement agencies, courts and correctional institutions are already extensively using a range of emerging technologies such as machine learning, predictive analytics, natural language processing, facial recognition systems, risk assessment algorithms etc. for AI in criminal justice. The advent and the use of these technologies for Criminal Justice will help make the system more efficient, accurate and quicker in decision making. Despite the advantages, it also poses serious problems regarding violation of personal liberty, denial of due process, absence of transparency and accountability as well as violation of constitutional rights etc. The criminal justice system (CJS) in India is a backlogged court system. There are congested prisons and delays in trial and the under-trial population is growing. As a result, we are seeing the growing use of various emerging technologies for the administration of criminal justice which were unthinkable only a few years.

Indian CJS place great emphasis on the rules pertaining to arrest, bail, and detention. The Constitution of India guarantees a person's life and personal liberty through Article 21 thus the aforementioned rights are directly impinge on them. As per the Supreme Court of India, any law that deprives a person of his or her personal liberty must do so according to the procedure established by law. The procedure must be fair just and reasonable within the meaning of Article 21. The court shall always presume in favour of the accused for bail. The basic principle is that bail will be granted, and jail

will not. India still has an unacceptable number of undertrials. Due to procedural delays and the unequal granting of bail, many people who are accused have to sit in jail for a long time. The last ten years have experienced the rise in complicity and sting in crimes.

From sentencing to forensics, AI is used in criminal justice system. Through predictive policing, law enforcement agencies can predict hotspots and patterns of crime. They allow police officials to better allocate scarce resources. Facial recognition technologies help in criminal investigations and suspect identification. Various jurisdictions are increasingly using risk assessment algorithms to assess the risks of reoffending, absconding or public harm. Decisions about arrest, pre-trial detention, sentencing, and bail activity may be informed by such systems. While we gain considerable administrative value from them, they raise issues of algorithmic bias, discrimination, and opacity. Academics have debated whether AI systems built on an analysis of historical data of criminals can potentially replicate social inequalities and bias within criminal justice institutions.

AI is slowly making its way into the Indian Legal System due to progressive initiatives like the e-Courts Project, SUPACE, automated legal research and predictive analytics platforms. Government officials have promoted the use of AI-based solutions for case management, legal translation and other judicial administration. Nevertheless, the application of AI in substantive judicial functions remains controversial in nature. Most commentators have noticed the issues of explainability, fairness, data protection and judicial independence. As a result, excess use of automated decision making in criminal justice proceedings is not

recommended. In fact, later court judgements have cleared the position to warn against any AI-related justice delivery but the administrative functions only. Judicial reasoning in matters relating to liberty, bail and sentencing cannot also be made through AI.

The altercation about AI and criminal justice, signals a start of the clash of two-worlds. Putting AI to work on one hand can remove many delays and procedures. It can help in enhancing the working of the judiciary i.e. providing timely justice. It can ensure consistency in rulings and may reduce the burden of already overstressed judges due to large volumes of cases. Conversely, algorithms can act like a black box, concealing principles of procedural fairness. We risk losing the safeguards against the arbitrary actions of the state. Additionally, individual evaluations for arrest, detention and bail, judicial discretion, and constitutional considerations may not be fully captured through algorithms.

This academic work examines the AI-based systems considering arrest or detention in offences for which less than three years is the penalty. It examines the possibilities presented by AI-driven systems in criminal law. Additionally, it examines the range of constitutional and legal hurdles that accompany the use of system. Additionally, it aims to determine how far emerging technology can do justice to fairness and human rights.

Literature Review

There has been a substantially growing academic interest across legal, technical and policy fields in the juxtaposition of AI and criminal justice. Academics have studied how artificial intelligence changes the criminal law landscape, as well as the constitutional concerns surrounding this change.

AI outpouring and perils in our criminal justice system has captured great attention in legal scholars. Hassan (2024) looked at using AI in our criminal justice system and submitted that they can make the judicial administration more efficient which can generate risks of fairness, transparency and accountability. Criminal justice data may reproduce historical bias in algorithmic systems.

According to Das (2023), AI technologies are widely used in law enforcement, courts and prisons. AI-assisted tools can be used in legal research, evidence analysis, case prediction, and case management. Explainability and judicial accountability are important hurdles to adoption.

According to a study of a journal article published in the *International Journal of Law, Policy, and Social Review*, AI and its use in the Indian criminal justice system. According to the authors, there is an expanding reliance on predictive policing and other surveillance technologies. Even if efficiency can be improved, the necessary safeguards must be in place to ensure that people's privacy, equality, and due process rights are protected, the research notes.

Research into AI governance within criminal procedures emphasizes the necessity of constitutional protections for due process. Despite the black-box nature of AIs, that does not stop the challenge to facts, and in any event, there is a fundamental affront to the principles of natural justice and procedural fairness. An algorithmic decision cannot be challenged by the relevant person due to a denial of justice and denial of remedy.

Researchers and policymakers have become increasingly interested in the relationship of AI and Justice. In 2025, Borgesano authored a systematic review on AI and Justice. He could classify the existing scholarship on AI and justice by means of his study. The analysis on AI and law was categorized as predictive justice, human.

Studies on bail decisions have received much attention due to their impact on liberty. The article on technological bail systems illustrates how a predictive tool could help flight-risk rates and reduce inconsistencies in human judgment. (29 words) According to some scholars, one of the risks is that algorithmic prediction may institutionalize economic and racial inequalities. If biases from the past still exist in the data training sets.

Using over 150,000 High Court bail judgments, Srivastava et al. (2025) created an Indian bail prediction system (IBPS). An AI system can help grant bail by learning useful legal features and producing justified output. Nonetheless, the authors emphasised the necessity of human involvement for fairness and constitutional safeguards.

In their article (2025), Deshmukh and Kamble provided their IndianBailJudgments-1200 dataset to promote research & development in legal natural language processing (NLP). Their work shows that there is increasing interest in the usage of artificial intelligence-based legal analytic tools for research and practice in different fields of law. The development of AI systems is underway for the in-depth.

The researchers Nigam et al. (2024) wanted to build a legal understanding of AI by training and fine-tuning LLMs on Indian legal case laws judgment which is NyayaAnumana and INLegalLlama. Machine learning models need a lot of data while making predictive models related to any legal judicial decision. As deep learning technology has become more powerful.

Recent academic debates on access to justice have been preoccupied with data protection, surveillance and algorithmic bias. Recent research, however, cites that AI can help to reduce backlog and improve efficiency in courts. A lot of researchers say that AI-enabled tools enhance legal research, reduce tedious manual work and help to get speedy resolution of disputes.

Studies have been done on AI in the criminal justice system by many scholars. The entire literature shows a

growing concern of AI in the criminal justice system which can help in increasing efficiency and consistency in the cases and case load management. Many people refer to the dangers of algorithms which include prejudice, non-clarity, breach of privacy, liberty eviction. The research also illustrates the significance of regulating these new technologies and most importantly, a judge must be used as a last resort and not as a pure substitute for the human judge or a technical judge in the decision making of arrest, bail and detention.

Objectives:

Objectives of the Study

- * To explore the impact of Artificial Intelligence on arrest, bail and detention as per the Indian criminal law.
- * To discuss the positive aspects of AI technology in enhancing the efficiencies and decisions of criminal justice procedures.
- * To examine the legal and ethical issues faced by AI regarding personal liberty and rights of the due process.

Methodology

A scholarly opinion, qualitative doctrinal research design has been adopted in the research to find out the impact of Artificial Intelligence on arrest, bail and detention under criminal law in India. This research is based on secondary information which has been collected through varied sources such as journal articles, books, legal commentaries, government records and policy paper, judgement of varied courts, the Constitution of India, the Bharatiya Nagarik Suraksha Sanhita (BNSS), 2023 and other relevant Indian criminal laws. Also, the research uses qualitative content analysis of the collected data. This research also studies the vernacular understanding and the legal scholarship on how AI affects personal liberty with the help of various legal evidence and precedents. The data collected from other sources consists of national and international literature regarding the AI assisted decision making in criminal justice and other systems which assist in detection, investigation and prosecuting of crime. The purpose behind collecting this data is to identify opportunities, challenges and emerging regulatory concerns. The researchers, through thematic analysis of collected data, wanted to study the impact of AI on arrest, bail, and detention under the criminal law of India.

Result and Analysis

Through a qualitative content analysis of research articles, legal documents, court rulings, policy papers, and studies, data was analysed for AI involvement in criminal justice. The analysis was done on three themes, viz, (i) AI and Arrest, Bail, Detention, (ii) Benefits of AI Assisted Criminal Justice; and (iii) Legal and Ethical Issues of AI in Judicial Decision Making.

Theme 1: Role of Artificial Intelligence in Arrest, Bail, and Detention

Table 1

Applications of AI in Criminal Justice Processes

Area

AI Application

Expected Function

Arrest

Predictive Policing

Identification of crime-prone areas and suspects

Investigation

Facial Recognition Systems

Suspect identification and evidence collection

Bail

Risk Assessment Algorithms

Evaluation of flight risk and reoffending probability

Detention

Prison Management Systems

Monitoring inmates and resource allocation

Courts

Case Analytics Tools

Assistance in legal research and case management

A close look reveals that AI technology is gaining popularity in various stages in the administration of criminal justice. Police departments can use predictive policing tools to prevent crime and allocate resources more effectively. Moreover, using facial recognition helps investigations locate suspects in digital databases. At the bail stage, judges can use AI-based risk assessment tools that analyse whether an accused will abscond or reoffend. AI efficiently enhances prison management and court administration, in addition to case management and population control. As of now, AI is functioning as a support system for judicial discretion in India.

Theme 2: Benefits of AI in Criminal Justice Decision-Making

Table 2

Key Benefits Identified in Literature

Benefit

Description

Efficiency

Faster processing of cases and legal information

Consistency

Reduction in variations in decision-making

Accuracy

Improved analysis of large legal datasets

Accessibility

Easier access to legal information and precedents

Resource Optimization

Better allocation of judicial and police resources

Research suggests that AI can enhance the efficiency of criminal justice institutions, as per the available literature. For instance, automated legal research and case analysis result in a time and cost saving through the processing of legal information. An AI automated legal research tool can ensure greater consistency in bail recommendations because it relies on objective criteria. The ability of AI systems to analyze and process significant amounts of data improves decision making. This helps the judiciary officers to take an informed decision in a procedural complexity case or otherwise which can be unnoticeable otherwise. Consequently, AI has the ability to clear case backlogs.

Theme 3: Legal and Ethical Challenges

Table 3
Challenges Associated with AI in Criminal Justice
Challenge
Impact on Criminal Justice
Algorithmic Bias
Risk of discriminatory outcomes
Lack of Transparency
Difficulty in understanding AI decisions
Privacy Concerns
Extensive collection and use of personal data
Accountability Issues
Uncertainty regarding responsibility for errors
Constitutional Concerns
Potential violation of due process and personal liberty

According to the findings, the biggest hurdle to the adoption of AI in criminal justice are still legal and ethical issues. AI models may develop algorithmic bias due to the social bias present in historical data used for their training. The prejudice may affect decisions regarding arrest, bail, etc. Due to their black-box nature, multiple AI models have transparency and explainability challenges. The collection and processing of personal data raise challenges of privacy and data protection. These matters become very important in cases where the decision affects the fundamental right to personal liberty under Article 21 of the Indian Constitution.

Theme 4: Impact of AI on Personal Liberty

Table 4
AI and Constitutional Rights
Constitutional Principle
Potential Positive Impact
Potential Risk
Equality Before Law
Uniform decision support
Algorithmic discrimination
Due Process
Faster case processing
Lack of explainability
Personal Liberty
Timely bail recommendations
Unjustified detention due to faulty predictions
Access to Justice
Improved legal assistance
Digital exclusion and technological dependency

Using AI or Artificial Intelligence for the protection of constitutional rights is possible. A data analysis will help us understand how this works. When it comes to diversity and equality, artificial intelligence plays an important role in promoting these values by supporting standardized decision-making free from human interference.

AI can help in making the criminal justice process for arrest, bail, and detention more efficient, consistent and accessible, but this study finds that AI cannot replace the human judgement in determining issues affecting constitutional rights and personal liberty. It is possible to use AI as an assistive technology with appropriate legal and ethical safeguards. The implementation of

strong in-court judicial supervision, accountability and data protection standards and the introduction of transparent algorithms is necessary so that the furtherance of technological innovation does not come at the cost of fundamental rights within the Indian CJS.

Discussion

As per the study, AI can influence the administration of criminal justice in India through its applications in arrest, bail and detention-related matters. According to FICCI, AI-enabled tools and applications can assist multiple stakeholder agencies including the law enforcers for crime analysis, courts for case management and judicial authorities to handle and find their way through mountains of legal data swiftly and effectively. According to the literature, there are useful recommendations for the more rapid, consistent, and efficient delivery and use of institutional resources. The study mentions that these advantages of AI are relevant in the Indian context with the courts having lakhs of pending cases and overflowing jails with undertrials.

Research has found that AI-assisted systems can help improve the adjudication of bail determinations of bail risk. A computer's output can give a score that provides the likelihood of something happening in the future. The system can forecast flight risk or repeat crime based on a range of information including criminal past, family connections, and more. For instance, based on the evidence against the accused, the judge can ascertain the odds of the person reoffending and skipping bail. As these scores are formed by the AI on the basis of data-driven scores and not on the judge's opinion with regards to the separate cases.

The report highlights several legal, ethical and constitutional issues, although AI usage has yielded favourable results so far. All decisions with regard to arrest, bail, and detention affect the fundamental right to personal liberty guaranteed under Article 21 of the Constitution of India. The use of AI raises concerns about transparency, accountability and procedural fairness. Most AI systems utilize complex algorithms that are not explicable or interpretable. Consequently, a person subjected to a decision may not be able to comprehend or challenge the decision. You're welcome. Please let me know in case you have more tasks.

Another important finding of the study reveals algorithmic bias. AI systems use past data for training the model and predicting the future. If the data used reflects existing social, economic or institutional bias, decisions may go unnoticed to cause discrimination, and discrimination would continue as the norm. This may violate the principle of equality before the law and also cause harm to vulnerable sections. In sum, the study shows the necessity of designing fair and transparent AI systems that criminal justice institutions can audit periodically.

The key finding is that AI cannot usurp the judicial discretion in personal liberty matters. Use of arrest, bail and detention will be dependent on circumstances,

consideration of constitutional values, and basic human rights principles that cannot be automated. The judge must always be the ultimate decision maker, while AI can only be a tool. Someone has to be there who can cross-check in order to make sure that the technology does not footnote reason and trample judicial independence.

In conclusion, the above discussion shows that AI has an important role in the Indian criminal justice system. Caution brings benefits from technological innovations. They can be useful and harmless tools. The personal freedom of the citizens should not become the casualty of these changes. Therefore, it has to follow constitutional safeguards and ethical principles.

Conclusions:

As per the research, AI can surely improve the arrest, bail and detention in the Indian criminal justice system efficiently, consistently and effectively. AI instruments can enable legal research, case administration, risk assessment and judicial administration, it goes on to state. This also cuts down on delays and advances justice access. But it is found that such a use compromises transparency, accountability, privacy, algorithmic bias, and constitutional rights. Arrest, bail and detention directly relate the rights to life and personal liberty as enshrined in Article 21 of the Constitution of India. AI must not be allowed to undermine human judgement. The results indicate that it can't be the ultimate decision-maker. It should rather assist, rather control the decision, judicial and legal entities must control the decision.

Recommendations:

According to this research, there is a necessity for a legal and regulatory framework to govern the use of AI in the criminal justice system. A legal framework that establishes standards related to transparency, explainability, accountability, and fairness of artificial intelligence-assisted adjudication should be established, according to the study. The research suggests frequent checks of artificial intelligence systems to deal with algorithm bias and unfair results. The report recommends implementing data protection mechanisms to ensure that individuals' privacy is duly apportioned and that sensitive information is protected. Officials of the judiciary, legal practitioners, and law enforcement authorities must be trained on the use of AI. The study, significantly, proposes that human review and judicial discretion must be used on AI recommendations, especially in arrest, bail and detention related matters. Put simply, the Constitution and personal liberty should not be violated because of technology.

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