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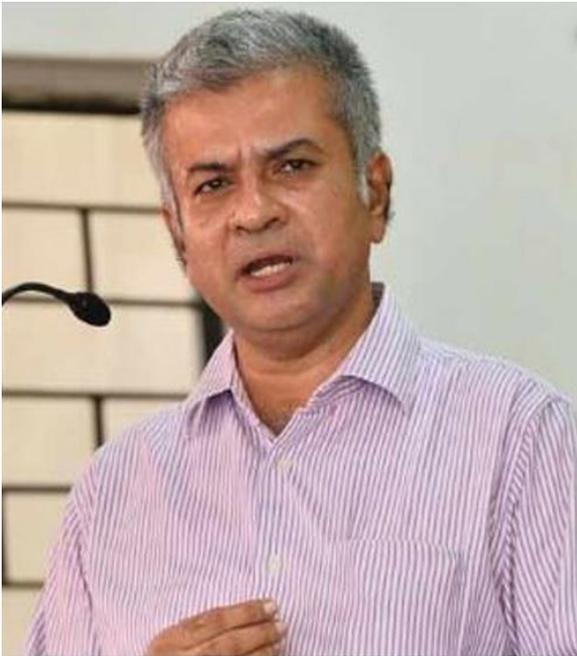
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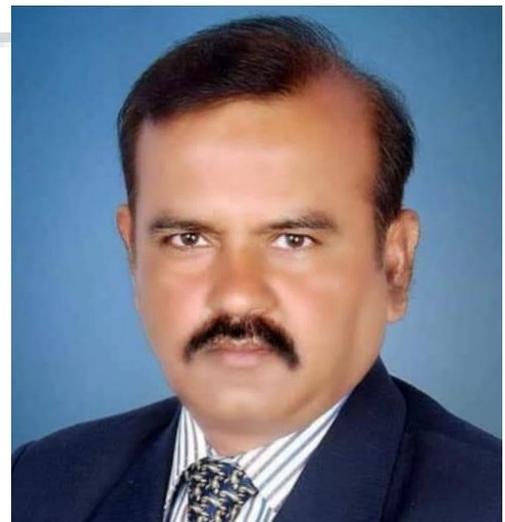


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WHITE BLACK LEGAL is an open access, peer-reviewed and refereed journal provide dedicated to express views on topical legal issues, thereby generating a cross current of ideas on emerging matters. This platform shall also ignite the initiative and desire of young law students to contribute in the field of law. The erudite response of legal luminaries shall be solicited to enable readers to explore challenges that lie before law makers, lawyers and the society at large, in the event of the ever changing social, economic and technological scenario.

With this thought, we hereby present to you

# **ARTIFICIAL INTELLIGENCE AND INDIAN CRIMINAL JUSTICE: JURISPRUDENTIAL REALIGNMENTS IN THE MODERN LEGAL FRAMEWORK**

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## **Abstract**

The emerging fast tracking of Artificial Intelligence (AI) into crime control, economic governance and social institutions has placed the domain of criminal justice in a transdesigned phase worldwide. Artificial intelligence has been out of the shadow of the digital policing and computerized surveillance and is now transforming jurisprudential frontiers, bringing to the fore the clash between innovation and constitutional protection. This article questions these tectonic changes as fitting into the context of the 21<sup>st</sup> century jurisprudence and contends that AI is not an addition but a radical reconfiguration of the epistemic and normativist frameworks criminal law and its mechanisms of justice operate on. The use of AI in crime detection and procedural adjudication, highlights changing state responses toward reactive justice to preemptive forms of governance, where anticipatory algorithms influence state responses in ways that confound the lines between suspicion, likelihood and guilt. These changes necessitate an immediate conceptual change of universal principles such as the presumption of innocence, proportionality of sentencing and the right to due process. This paper places AI as a challenge and a catalyst: as a challenge because it threatens to increase structural inequality and undermine time-honored protection infrastructures, and as a catalyst in that it compels us to rethink how we might reform the normative infrastructures to hold accountable, safeguard human agency, and reinforce the resilience of democratic institutions. The analysis by considering the cases of algorithmic policing, the use of risk assessment in sentencing, admissibility of digital evidence, and AI-based forensic technique identifies the new legal principles which foresee the juridical spirit of the 21<sup>st</sup> century. Finally, it argues that the extent to which the implementation of AI will continue to succeed in the future of criminal justice depends on the delicately balanced reconciliation of technological efficiencies and jurisprudential integrity. Whether legislatures and courts can develop a balance that both

protects civil liberties and makes responsible innovation possible will not only define the future of criminal law at the dawn of the digital century, but also define the moral framework of justice more broadly.

**Keywords:** artificial intelligence, criminal justice, due process, predictive policing, jurisprudence

## 1. Introduction

Artificial Intelligence (AI) is rapidly emerging as a transformative force in the Indian criminal justice system, catalyzing a paradigm shift in the way crime prevention, investigation, adjudication, and correctional processes are conducted<sup>1</sup>. India's criminal justice system, characterized by chronic case backlogs, resource constraints, and the urgent need for timely and equitable justice, stands at the cusp of technological revolution. AI technologies offer unprecedented opportunities for enhancing efficiency, accuracy, and fairness in law enforcement and judicial practices.

Driven by innovations under Industry 4.0, AI-based solutions such as predictive policing, facial recognition, automated evidence analysis, and risk assessment algorithms are being progressively adopted across state and central law enforcement agencies<sup>2</sup>. For instance, initiatives like Telangana's Crime Mapping Analytics and Predictive System for hotspot identification, Maharashtra's AI-powered CCTV surveillance, and Delhi's deployment of facial recognition for security represent India's embrace of smart policing and digital governance<sup>3</sup>. These technologies not only accelerate crime detection and prevention but also streamline investigative and administrative procedures, offering the promise of expeditious and data-driven justice. The integration of AI in judicial processes enables rapid legal research, precedent analysis, and efficient docket management, addressing systemic issues such as delayed trials. AI-driven legal databases support judges and lawyers in navigating complex statutes like the Indian Penal Code (IPC) and Criminal Procedure Code (CrPC), contributing to better-informed decisions and higher standards of legal accuracy. Automated documentation, voice recognition in FIR filing, and chatbots for legal assistance further

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<sup>1</sup> [PDF] Artificial intelligence and criminal justice system in India: A critical study

<sup>2</sup> AI In Criminal Justice In India - PWOnlyIAS <https://pwnonlyias.com/current-affairs/ai-in-criminal-justice-in-india/>

<sup>3</sup> PDF] artificial intelligence in the indian criminal justice system <https://sdgsreview.org/LifestyleJournal/article/download/4877/2417/13572>

democratize access to justice and reduce administrative burdens<sup>4</sup>.

As India accelerates its digital transformation through initiatives like the e-Courts Project and the Digital India Mission, the criminal justice system must evolve in tandem—not only technologically but also philosophically<sup>5</sup>. The jurisprudential shifts triggered by AI are not merely technical adjustments; they represent a reconfiguration of the relationship between the state, the individual, and the law.

This article argues that while AI holds immense promise in enhancing efficiency, transparency and access to justice,<sup>6</sup> its adoption must be tempered by a robust commitment to constitutional values, human rights and democratic accountability. The future of criminal justice in India will depend not only on how AI is deployed but on how its development is governed, critiqued and understood within the broader framework of legal thought.<sup>7</sup>

However, the integration of AI into criminal justice is not without risks. Algorithmic bias, opacity in decision-making, and potential infringements on privacy and due process raise serious ethical and constitutional concerns. Can an AI system trained on historical data avoid replicating caste, gender, or religious prejudices? Can predictive policing be reconciled with the presumption of innocence? Can judicial discretion survive the rise of algorithmic sentencing?

To address these questions, this paper adopts a multidisciplinary approach—drawing from legal theory, constitutional law, technology ethics, and comparative jurisprudence. It examines global models of AI integration, analyzes India's current applications such as SUPACE and facial recognition systems, and evaluates the implications of recent legislative reforms. Ultimately, the paper argues for a balanced approach that embraces technological innovation while safeguarding the core values of justice, fairness, and accountability.

In doing so, this research contributes to a growing body of scholarship that seeks to understand

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<sup>4</sup> [PDF] Integrating AI in India's Judiciary and Law Enforcement Introduction <https://static.pib.gov.in/WriteReadData/specificdocs/documents/2025/feb/doc2025225508901.pdf>

<sup>5</sup> AI and Indian Criminal Justice System - iPleaders <https://blog.iplayers.in/ai-and-indian-criminal-justice-system/>

<sup>6</sup> Use of Artificial Intelligence in Criminal Justice System - NLIU-CLT <https://clt.nliu.ac.in/?p=431>

<sup>7</sup> ARTIFICIAL INTELLIGENCE (AI) IN INDIAN CRIMINAL JUSTICE ... <https://lawfullegal.in/artificial-intelligence-ai-in-indian-criminal-justice-system/>

the role of AI not just as a tool of efficiency, but as a catalyst for jurisprudential transformation. The future of criminal justice in India will not be defined solely by how quickly it adopts AI, but by how thoughtfully it integrates it into the moral and constitutional fabric of its legal system.

## 2. Introduction to Jurisprudential Shifts in the Age of AI

The integration of Artificial Intelligence (AI) into the criminal justice system marks a paradigmatic shift in legal thought and practice. Traditional jurisprudence, rooted in human reasoning, moral philosophy, and interpretive discretion, is now confronted by algorithmic logic, data-driven decision-making, and predictive analytics. This section explores the theoretical underpinnings of law and justice in the context of AI, examining how foundational legal doctrines are being reinterpreted, challenged, or reinforced in the 21st century.

### 2.1 Classical Jurisprudence vs. Techno-Legal Paradigms

Historically, Indian jurisprudence has drawn from a blend of common law traditions, constitutional morality, and socio-legal realism. Legal reasoning has emphasized:

- Human discretion guided by precedent and equity
- Moral accountability rooted in constitutional values
- Procedural fairness as a safeguard against arbitrariness

AI introduces a techno-legal paradigm where:

- Decisions may be based on statistical correlations rather than normative reasoning
- Algorithms may replicate or amplify existing biases
- The opacity of machine learning models challenges the principle of audi alteram partem (hear the other side)

This tension between classical jurisprudence and computational logic necessitates a rethinking of what constitutes "justice" in an AI-mediated legal system.

### 2.2 Computational Jurisprudence

Computational jurisprudence is not merely the digitization of legal processes—it is a paradigm shift that redefines how law is conceptualized, interpreted, and applied. At its foundation, this field seeks to encode legal reasoning into algorithmic structures, allowing machines to simulate

or assist in judicial decision-making.<sup>8</sup> This transformation draws heavily from legal positivism, which holds that law is a system of rules created by legitimate authority, independent of moral considerations. By translating statutes and case law into formal logic, computational systems can perform tasks like legal classification, precedent analysis, and even predictive adjudication. However, this mechanistic approach raises profound tensions with natural law theory, which asserts that law must be rooted in moral principles and human dignity. Algorithms, no matter how sophisticated, lack the capacity for empathy, conscience, or moral deliberation—qualities that are central to justice.

Moreover, the rise of computational jurisprudence challenges the traditional understanding of judicial discretion. Judges often rely on context, emotion, and ethical judgment—elements that are difficult to quantify or encode. When machine learning models are used to recommend bail, sentencing, or parole decisions, they risk reinforcing systemic biases embedded in historical data,<sup>9</sup> thereby violating principles of substantive equality under Article 14 of the Indian Constitution. The opacity of many AI systems also undermines procedural fairness, especially the right to a reasoned decision and the ability to contest it—core tenets of natural justice like *audi alteram partem* and *nemo iudex in causa sua*.

From a constitutional perspective, computational jurisprudence must be reconciled with Article 21, which guarantees the right to life and personal liberty. Automated legal decisions, if unchecked, could infringe upon these rights by denying individuals the human oversight that safeguards against arbitrary or unjust outcomes.<sup>10</sup> This concern is amplified in criminal justice systems, where the stakes are highest and the margin for error smallest.

Yet, computational jurisprudence also offers unprecedented opportunities. It can democratize access to legal information, reduce case backlogs, and enhance consistency in legal interpretation. Tools like natural language processing can assist lawyers in drafting,

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<sup>8</sup> Chen, D. L., & Eigel, J. (2020). The promise of machine learning for the courts of India. National Bureau of Economic Research. Retrieved from <http://users.nber.org/~dlchen/papers/>

<sup>9</sup> Legal Service India. (2024). AI and predictive analytics in law: Revolutionizing the justice system. Retrieved from <https://www.legalserviceindia.com/legal/article-13543-ai-and-predictive-analytics-in-law-revolutionizing-the-justice-system.html>

<sup>10</sup> CALJ. (2024). *AI judges: The question of AI's role in Indian judicial decision-making*. Centre for Advanced Legal Studies Journal. Retrieved from <https://www.calj.in/post/ai-judges-the-question-of-ai-s-role-in-indian-judicial-decision-making>

researching, and analyzing complex legal documents, while predictive analytics can help courts anticipate litigation trends and allocate resources more efficiently. The challenge lies in designing systems that are not only technically robust but also ethically sound and legally accountable.

Ultimately, computational jurisprudence invites a reexamination of what it means to "do justice." It forces legal scholars, technologists, and policymakers to grapple with questions that are both ancient and urgent: Can justice be automated? Should it be? And how do we ensure that in our pursuit of efficiency, we do not lose sight of equity, humanity, and the rule of law?

### **3. Reconciling AI with Indian Constitutional Norms**

Reconciling AI with Indian constitutional norms involves addressing multiple challenges to ensure that the deployment of artificial intelligence within the legal and criminal justice system aligns with the fundamental rights and values enshrined in the Indian Constitution. Key constitutional provisions implicated include the right to equality (Article 14), the right to life and personal liberty (Article 21), protection against self-incrimination and arbitrary prosecution (Article 20), and privacy rights implicit under Article 21 and reinforced by the Digital Personal Data Protection Act, 2023.

#### **Key Areas of Reconciliation**

##### **A. Ensuring Equality and Non-Discrimination (Article 14)**

AI systems are typically trained on historical data, which may embed societal biases and systemic discrimination. If such biased data underpins AI algorithms used in criminal justice—such as predictive policing, bail assessments, or sentencing recommendations<sup>11</sup>—it can perpetuate or even amplify inequality, violating the right to equality before the law. Continuous algorithmic audits, transparency requirements, and corrective interventions are essential to avoid discriminatory outcomes and uphold constitutional guarantees.

##### **B. Protecting Right to Life and Personal Liberty (Article 21)**

Article 21 guarantees protection of life and liberty, which includes the right to due process and fair trial. Introducing AI-driven decisions must not undermine procedural fairness, human

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<sup>11</sup> AI and India's Legal Landscape <https://www.drishtiiias.com/daily-updates/daily-news-editorials/ai-and-india-s-legal-landscape>

oversight, or meaningful legal recourse. AI applications must remain tools aiding judicial discretion, ensuring affected individuals have the right to explanation and to challenge adverse decisions resulting from AI analysis, upholding fair trial guarantees.<sup>12</sup>

### **C. Safeguarding Privacy Rights**

India's Digital Personal Data Protection Act, 2023, recognizes privacy as a fundamental right. Use of AI technologies involving mass data collection (e.g., biometric databases like Aadhaar), surveillance, and profiling are potential flashpoints for infringing individual privacy.<sup>13</sup> Constitutional compliance requires stringent data governance policies, limiting governmental surveillance, mandating consent, and securing sensitive data to prevent arbitrary or disproportionate intrusions into privacy.

### **D. Reconceptualizing Legal Personhood and Liability**

The deployment of autonomous AI systems in investigative and judicial processes raises novel questions about agency and accountability. Indian jurisprudence will need to evolve frameworks for assigning responsibility when AI errors cause harm, balancing between human operators, AI developers, and institutions. Possible legal reforms might explore limited AI personhood for regulatory purposes but must retain human legal agency and safeguards.

### **E. Transparency and Accountability Mechanisms**

Constitutional legitimacy demands that AI systems operate transparently and accountably. Given AI's "black box" complexity, ensuring explainability and auditability is necessary to maintain public trust and legal validity. Judicial guidelines, statutory mandates for explanation rights, and independent oversight bodies are crucial to harmonize AI usage with constitutional norms.

## **4. AI in Indian Legal Institutions**

Artificial Intelligence (AI) is rapidly transforming legal institutions worldwide, and India is no exception. The Indian judiciary and legal system, long beset with challenges such as case backlogs, language barriers, and procedural delays, have begun integrating AI technologies to enhance efficiency, accessibility, and justice delivery. This integration spans judicial processes,

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<sup>12</sup> Artificial in the criminal justice system <https://sdgsreview.org/LifestyleJournal/article/view/4877>

<sup>13</sup> AI and Indian Law <https://singhania.in/blog/ai-and-indian-law-addressing-privacy-ethics-and-copyright-challenges-in-the-digital-age>

law enforcement, legal research, and administrative functions, marking a crucial jurisprudential shift in India's legal landscape.

The Government of India's e-Courts Project Phase III exemplifies this transformation through the ambitious objective of judicial digital modernization, with an allocation of ₹7210 Crore, including over ₹53 Crore dedicated to integrating AI and blockchain technologies across High Courts. This initiative employs AI tools such as Machine Learning (ML), Natural Language Processing (NLP), Optical Character Recognition (OCR), and Predictive Analytics to streamline case management, automate routine administrative tasks, and enable advanced legal research. The implementation of AI-driven legal translation tools, notably the Supreme Court's SUVAS system, seeks to surmount language barriers by translating judgments into regional languages, thereby democratizing access to justice in a linguistically diverse country.

In law enforcement, AI advances crime detection, predictive policing, and surveillance. Programs like Vimarsh 2023's AI-driven innovations in crime prevention demonstrate the government's commitment to leveraging technology to build safer communities. Face recognition technology and AI-assisted digital evidence management are increasingly utilized in several states, improving investigative accuracy and speeding judicial processes while simultaneously raising privacy concerns addressed by the Digital Personal Data Protection Act, 2023.

One of the judicial milestones is the Supreme Court Portal for Assistance in Court Efficiency (SUPACE), an AI platform designed to aid judges by offering legal research assistance, reviewing precedents, and drafting judgments. SUPACE's implementation has reduced case pendency and improved judicial efficiency, albeit the judiciary maintains that AI should assist rather than replace human judgment to preserve judicial independence. Similarly, AI platforms developed by Indian legal tech startups—such as SpotDraft, CaseMine, and NearLaw—enhance legal research capabilities, making case analysis faster, more consistent, and cost-effective across various law practices.

Despite these promising developments, significant challenges hinder the broad implementation of AI in Indian legal institutions. The absence of specific AI-focused legislation within India's legal framework engenders ambiguity regarding accountability, liability, and procedural justice when AI is employed in judicial or quasi-judicial settings. Current statutes like the Information

Technology Act, 2000 and the Digital Personal Data Protection Act, 2023 provide only partial governance and do not fully address ethical and operational complexities associated with AI deployment in law.<sup>14</sup>

Ethical issues such as algorithmic bias, data privacy, and transparency remain critical concerns. AI algorithms trained on historical legal data may perpetuate or even exacerbate societal biases, potentially infringing on constitutional guarantees of equality and due process (Articles 14 and 21 of the Indian Constitution). The “black box” nature of many AI systems complicates judicial review, making it difficult to ascertain how decisions are reached, thereby challenging the principles of accountability and the right to a fair trial. Additionally, automation bias—the tendency to over-rely on AI recommendations—poses risks to judicial independence, underscoring the need for robust human oversight mechanisms.<sup>15</sup>

Data security is paramount, given the sensitive nature of judicial data. The Digital Personal Data Protection Act addresses data privacy concerns but faces challenges in cross-border data transfers, encryption standards, and safeguarding against unauthorized data misuse. India’s legal ecosystem must therefore adopt more stringent technical and regulatory protocols to ensure data sovereignty and privacy in AI applications.

To address these gaps, experts advocate establishing a comprehensive legal framework specifically tailored to AI governance in law, including an “AI and Law Act” to define permissible uses, required transparency, liability structures, and grievance redressal mechanisms. The creation of independent AI ethics committees—potentially under the Supreme Court’s aegis—would be crucial for algorithmic auditing, ethical oversight, and periodic guideline issuance to uphold human rights and judicial independence. Judicial and professional capacity-building initiatives also play a vital role; law schools and judicial academies must incorporate training on AI ethics, digital literacy, and AI jurisprudence to empower legal professionals to critically engage with AI tools. Public participation in AI policy-making is equally important to ensure transparency, legitimacy, and inclusiveness. Stakeholder consultations involving legal technologists, jurists, bar councils, civil society, and

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<sup>14</sup> Press Information Bureau, Government of India, “Integrating AI in India’s Judiciary and Law Enforcement,” February 24, 2025.

<sup>15</sup> Osho Gupta, “AI and the Indian Legal System: Navigating Rights, Regulation, and Responsibility,” *International Journal for Multidisciplinary Research*, Vol. 7, Issue 3, May-June 2025.

academia will help mitigate regulatory gaps and unforeseen bias.

## 5. Jurisprudential Challenges in the Age of AI

The advent of Artificial Intelligence (AI) has ushered in a new era of technological advancement that profoundly impacts various sectors, notably the legal and judicial systems. While AI offers promising benefits such as enhanced efficiency, predictive analytics, and decision-making support, it simultaneously presents fundamental jurisprudential challenges that question traditional legal theories, principles of justice, and the role of human agency within the law. This essay explores these critical challenges, articulating the tension between established jurisprudence and emerging AI technologies, supported by contemporary legal scholarship and case studies.

### Algorithmic Bias and Substantive Equality

AI systems trained on historical legal data risk perpetuating entrenched biases, especially against marginalized communities. This undermines Article 14 of the Indian Constitution, which guarantees equality before the law. Studies have shown that predictive bail algorithms, for instance, may produce skewed outcomes based on caste, gender, or socioeconomic status (Lawful Legal, 2024). Without rigorous bias audits and ethical oversight, computational jurisprudence could reinforce the very inequalities it aims to resolve.

*“Algorithmic bias is not just a technical flaw—it is a constitutional violation when it affects access to justice”* (Lawful Legal, 2024).

### Opacity and the Black Box Problem

One of the foremost jurisprudential challenges is AI's opacity—the so-called “black box” problem—whereby algorithmic decisions are inscrutable even to their developers. This opacity undermines the fundamental legal principle of transparency requisite for due process and fair trial rights. When legal decisions rely on proprietary or complex AI systems, affected parties face difficulties in understanding, contesting, or appealing decisions, conflicting with procedural fairness and accountability norms.

### Due Process and Procedural Fairness

AI-driven decisions often lack transparency, making it difficult for litigants to understand or challenge outcomes. This threatens the principle of *audi alteram partem*, a cornerstone of

natural justice (LotusArise, 2023). While tools like SUPACE have improved judicial efficiency, they raise concerns about interpretative latitude and the erosion of human discretion. The absence of statutory mandates for algorithmic explainability in India further complicates procedural fairness.

### **Autonomy and Judicial Discretion**

Judicial discretion is a hallmark of legal reasoning, allowing judges to interpret law in context. However, AI tools that recommend sentencing or bail decisions may subtly influence or override human judgment. This challenges the doctrine of stare decisis and the independence of the judiciary (Legal Service India, 2024). Scholars argue that over-reliance on algorithmic outputs risks reducing judges to passive validators of machine logic.

### **Accountability and Liability Dilemmas**

AI's autonomous or semi-autonomous decision-making capabilities complicate traditional frameworks of liability and accountability. Questions arise: who is responsible when AI errors lead to wrongful convictions, biased sentencing, or privacy infringements? Is it the developers, deploying agencies, or the AI itself? Jurisprudence must evolve new doctrines or adapt existing ones to allocate responsibility effectively without impeding innovation or justice.

### **Bias and Discrimination Embedded in AI Systems**

AI is only as unbiased as the datasets upon which it is trained. Historical social injustices manifested in data can lead to AI perpetuating or amplifying discrimination, undermining the legal commitment to equality and non-discrimination enshrined in constitutions and human rights treaties. Courts and lawmakers face the challenge of ensuring AI transparency, auditing for bias, and implementing corrective algorithms to uphold constitutional guarantees of equal protection under the law.

### **Erosion of Human Agency and Moral Judgment**

The delegation of critical legal decisions to AI raises concerns about the erosion of human agency, moral responsibility, and the empathetic components of justice. Jurisprudence traditionally holds that justice requires human deliberation, responsiveness to context, and moral reasoning—facets that AI currently lacks and may never fully replicate. Overreliance on AI risks “dehumanizing” justice, where mechanistic decisions supplant individualized consideration.

### **Privacy and Data Protection**

AI systems rely on vast datasets, often collected without informed consent. This raises serious concerns under Article 21, which guarantees the right to privacy as affirmed in *Justice K.S. Puttaswamy v. Union of India*. The pending Digital Personal Data Protection Act does not fully address AI-specific risks, such as re-identification, profiling, and surveillance (Sneha Kumari, 2025). Robust data governance policies are essential to ensure that computational jurisprudence respects individual autonomy.

### **Access to Justice and the Digital Divide**

While AI promises efficiency, its benefits are unevenly distributed. Over 60% of legal professionals in India lack meaningful access to AI tools due to cost, infrastructure, and training barriers (Chen & Egel, 2020). This digital divide contradicts the constitutional mandate for equal access to justice. Public investment in legal-tech infrastructure and inclusive deployment strategies are necessary to prevent AI from becoming a tool of exclusion.

## **6. Conclusion**

The 21st century has ushered in a technological renaissance that is reshaping institutions across the globe, and the criminal justice system in India is no exception. Artificial Intelligence (AI), once confined to speculative fiction and theoretical discourse, now occupies a central role in legal innovation, policy reform, and judicial administration. As this paper has explored, the integration of AI into India's criminal justice framework presents both unprecedented opportunities and profound jurisprudential challenges. The implications are not merely procedural or administrative—they strike at the very core of constitutional values, legal philosophy, and the social contract between the state and its citizens.

At its most promising, AI offers the potential to revolutionize the criminal justice system by enhancing efficiency, reducing human error, and democratizing access to legal resources. Predictive policing, intelligent case management, automated legal research, and AI-assisted sentencing are no longer distant possibilities—they are emerging realities. Tools like SUPACE (Supreme Court Portal for Assistance in Court Efficiency) exemplify how AI can support judges in navigating complex legal data, thereby expediting decision-making and reducing case backlogs. In a country where judicial delays often translate into justice denied, such innovations are not only welcome but necessary.

However, the jurisprudential shifts triggered by AI are far from unproblematic. The criminal justice system is not a mere mechanism for dispute resolution—it is a moral and constitutional institution tasked with safeguarding liberty, ensuring fairness, and upholding the rule of law. AI, by its very nature, operates on patterns, probabilities, and historical data. This raises critical concerns about algorithmic bias, especially in a society as diverse and stratified as India. If AI systems are trained on data that reflect existing prejudices—be it caste, religion, gender, or socioeconomic status—they risk perpetuating and amplifying those biases under the guise of objectivity. In criminal justice, where the stakes involve liberty and life, such distortions are not just technical flaws—they are constitutional violations.

Moreover, the opacity of AI decision-making poses a direct threat to procedural fairness. The principle of *audi alteram partem*—the right to be heard—is foundational to Indian jurisprudence. Yet, AI systems often function as “black boxes,” making decisions that are difficult to interpret, challenge, or audit. This undermines the transparency and accountability that are essential to due process. Without clear statutory mandates for algorithmic explainability, litigants may find themselves at the mercy of inscrutable machine logic, unable to contest outcomes that affect their fundamental rights.

Judicial discretion, another cornerstone of criminal jurisprudence, also faces erosion in the age of AI. While consistency in sentencing is desirable, the human element in judicial reasoning allows for contextual interpretation, empathy, and moral judgment. AI tools that recommend bail or sentencing based on statistical models may inadvertently reduce judges to passive validators of algorithmic outputs. This challenges the doctrine of *stare decisis* and the independence of the judiciary, raising questions about who truly holds the reins of justice in an AI-mediated system.

The issue of accountability further complicates the landscape. Traditional legal doctrines such as *mens rea*, *vicarious liability*, and *strict liability* are ill-equipped to address errors made by autonomous systems. When an AI tool misclassifies a suspect, recommends an unjust sentence, or fails to flag exculpatory evidence, who bears the legal responsibility? The developer? The deploying agency? The judge who relied on the tool? India currently lacks a coherent legal framework to assign liability in such scenarios, leaving victims of algorithmic injustice without a clear path to redress.

Privacy, too, emerges as a critical concern. AI systems thrive on data—often personal, sensitive, and collected without informed consent. In the context of criminal justice, this includes biometric data, surveillance footage, behavioral analytics, and social media activity. The landmark judgment in *Justice K.S. Puttaswamy v. Union of India* affirmed the right to privacy as a fundamental right under Article 21 of the Constitution. Yet, the deployment of AI in policing and investigation risks violating this right, especially in the absence of robust data protection laws. The proposed Digital Personal Data Protection Act, while a step forward, does not fully address the unique risks posed by AI, such as re-identification, profiling, and predictive surveillance.

Another dimension that demands attention is the digital divide. While AI promises to democratize access to justice, its benefits are unevenly distributed. Many legal professionals, especially in rural and semi-urban areas, lack the infrastructure, training, and resources to engage meaningfully with AI tools. This creates a two-tiered justice system—one that is technologically empowered and another that remains analog and underserved. Bridging this divide requires public investment in legal-tech infrastructure, capacity-building programs, and inclusive deployment strategies that prioritize equity over efficiency.

In light of these multifaceted challenges, the future of criminal justice in India must be guided by a jurisprudence that is both forward-looking and constitutionally anchored. Legal reforms must go beyond technical regulation and engage with the philosophical underpinnings of justice in an AI age.

This includes:

- Mandating algorithmic transparency and explainability through statutory provisions.
- Establishing independent oversight bodies to audit AI tools used in criminal justice.
- Developing ethical guidelines for the deployment of AI in policing, adjudication, and corrections.
- Ensuring informed consent and data protection in all AI-related processes.
- Promoting interdisciplinary collaboration between technologists, jurists, ethicists, and civil society actors.

Ultimately, the integration of AI into India's criminal justice system is not a question of *if*, but *how*. The challenge lies in ensuring that technological innovation does not come at the cost of

constitutional integrity. AI should serve as a tool to enhance human judgment, not replace it; to support legal reasoning, not supplant it; and to uphold justice, not undermine it. The jurisprudential shifts of the 21st century demand a reimagining of legal norms, not their abandonment. As India stands at the crossroads of legal tradition and technological transformation, it must choose a path that honors its constitutional heritage while embracing the possibilities of the future. The criminal justice system must evolve—not just in form, but in spirit—to ensure that justice remains not only efficient, but equitable, transparent, and humane.



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