
JUSTICE IN THE AGE OF ALGORITHMS: A CONSTITUTIONAL ANALYSIS OF AI GOVERNANCE

Shradha Shankar, B.B.A. LL.B. (Hons.), Symbiosis Law School, Pune

ABSTRACT

The rising application of Artificial Intelligence (AI) in governance by the State has resulted in a paradigm shift in the nature of the decision-making mechanisms in India. Even though the application of Artificial Intelligence has the potential to generate optimal results in decision-making with speed and objectivity, there is a significant constitutional issue surrounding the application of Artificial Intelligence in decision-making in India.

This research undertakes a comprehensive constitutional analysis of AI-based decision-making by the State, examining its compatibility with core constitutional guarantees under Articles 14, 19, and 21, along with the evolving right to privacy. Through a doctrinal research methodology, the paper analyses how opacity, algorithmic bias, lack of explainability, and inadequate accountability mechanisms undermine constitutional values of fairness, reasonableness, and proportionality. The study further explores the State's constitutional responsibility in regulating both public and private uses of AI that have a direct impact on fundamental rights.

The paper argues that, in the absence of a rights-based regulatory framework, the unregulated adoption of AI risks institutionalising digital arbitrariness and inequality. It concludes by proposing constitutional and policy-oriented reforms aimed at ensuring that AI functions as a tool of governance consistent with constitutional supremacy, rather than as an unchecked substitute for human judgment.

Keywords: Artificial Intelligence, Algorithmic Governance, Fundamental Rights, Indian Constitution, Equality and Non Arbitrariness, Due Procedure, Equality Before Law.

INTRODUCTION

A comprehensive dictionary definition of artificial intelligence (AI) is *'the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.'*¹ AI systems can be used by decision-makers, like court judges, administrative law judges, and arbitrators, to assist with the adjudicative process.²

In recent years, the use of AI and algorithmic decision-making has expanded rapidly across multiple sectors, transforming how modern States exercise power. These technologies promise enhanced efficiency, consistency, and cost-effectiveness, enabling the State to manage complex administrative functions at scale. However, the increasing reliance on algorithmic systems also raises fundamental legal and constitutional concerns³. The Constitution of India mandates that all State action must conform to the principles of equality, fairness, reasonableness, and accountability. The increasing use of complex and opaque algorithmic systems in decision-making poses challenges to the enforceability of this guarantee.

Unlike traditional administrative decision-making, algorithmic systems often operate through opaque processes that are difficult to interpret or challenge. They rely heavily on historical data, which may reflect existing social inequalities, and they frequently lack mechanisms for transparency, explanation, or meaningful human oversight. As a result, algorithmic decision-making has the potential to affect individual rights in ways that are difficult to detect or remedy through conventional legal processes.

This paper seeks to examine the constitutional implications of AI-based algorithmic decision-making in India and to analyse whether existing constitutional principles are adequate to ensure that the deployment of AI by the State remains consistent with fundamental rights and democratic values. It critically analyses whether existing constitutional provisions particularly those governing equality, due process, and proportionality are sufficient to regulate AI-driven governance and also questions the adequacy of constitutional safeguards in preventing arbitrary

¹ Oxford Languages, *"Artificial Intelligence"*, Oxford University Press, available at Oxford Languages Dictionary.

² Christoph K. Winter, *The Challenges of Artificial Judicial Decision-Making for Liberal Democracy*, in *Judicial Decision-Making: Integrating Empirical and Theoretical Perspectives* 179, 180 (Piotr Bystranowski et al. eds., 2022); Benjamin Minhao Chen et. al., *Having Your Day in Robot Court*, 36 Harv. J.L. & Tech. 127, 128 (2022).

³ Id.

and discriminatory outcomes. The study ultimately explores whether constitutional principles can meaningfully constrain algorithmic power, or whether new interpretive and regulatory frameworks are required to ensure that technological governance remains constitutionally compliant.

RESEARCH QUESTIONS

1. To examine the constitutional implications of AI-based decision-making by the State in India.
2. To analyse the impact of algorithmic governance on fundamental rights under the Constitution of India.
3. To assess whether existing constitutional principles can regulate opaque and automated decision-making systems.
4. To propose reforms that ensure AI governance aligns with constitutional values of equality, fairness, and accountability.

RESEARCH OBJECTIVE

1. Whether AI-driven decision-making by the State complies with constitutional guarantees of equality and non-arbitrariness?
2. How does algorithmic governance impact due process, personal liberty, and privacy under the Constitution of India?
3. What safeguards are necessary to prevent arbitrary and discriminatory outcomes in algorithmic governance?

RESEARCH METHODOLOGY

For this study, a *doctrinal method of legal research* would be used, and it would depend upon primary and secondary sources of law. Constitutional provisions, decisions of the Supreme Court and High Courts of India, and statutes would be some of the primary sources of this study. Secondary sources include academic literature, journal articles, reports of expert committees, policy documents, and comparative legal materials.

A *comparable approach* is also used to analyse the international aspects of regulating algorithmic decision-making, especially as has been done in the European Union and the

United States, to derive insights that are helpful for the legal framework for India. The study is basically analytical as well as descriptive.

REVIEW OF LITERATURE

Algorithmic governance refers to the use of automated systems and data-driven algorithms to assist or replace human decision-making in public administration. These systems range from decision-support tools, which provide recommendations, to fully automated systems that determine outcomes without meaningful human intervention.

“An algorithm is a self-contained step-by-step set of operations that computers and other 'smart' devices carry out to perform calculations, data processing, and automated reasoning tasks.” Diakopolous defines an algorithm as “a series of steps undertaken in order to solve a particular problem or accomplish a defined outcome.”⁴

1. Global Perspective on AI in Legal Systems

Scholarly discourse on AI in legal systems highlights both its transformative potential and inherent risks. Susskind (2019) argues that while AI can enhance efficiency by automating routine legal tasks, it must complement rather than replace human judgment.⁵ Calo (2015) draws attention to the accountability deficit created by opaque “**black box**” algorithms, which conflict with principles of transparency and due process.⁶ The EU High-Level Expert Group on AI (2019) proposes a framework for “trustworthy AI,” established seven key requirements – human agency and oversight, technical robustness and safety, privacy and data governance, transparency, diversity and fairness, societal and environmental well being and accountability.⁷ Pasquale (2015) further critiques algorithmic governance, warning that opaque systems can reinforce bias and undermine legal accountability.⁸

⁴ Diakopolous, N. (2015) Algorithmic Accountability, Digital Journalism 3(3): p400.

⁵ Nair, V., Susskind, J. & Hinton, G., Analysis-by-Synthesis by Learning to Invert Generative Black Boxes, in Lecture Notes in Computer Science 971 (Springer 2008).

⁶ Collier, N., Dalcin, L., Pardo, D. & Calo, V., The Cost of Continuity: Performance of Iterative Solvers on Isogeometric Finite Elements, arXiv (2012).

⁷ Rodríguez, N., Ser, J., Coeckelbergh, M., De Prado, M., Herrera-Viedma, E. & Herrera, F., Connecting the Dots in Trustworthy Artificial Intelligence: From AI Principles, Ethics, and Key Requirements to Responsible AI Systems and Regulation, 99 Information Fusion 101896 (2023).

⁸ Frank Pasquale, The Black Box Society: The Secret Algorithms That Control Money and Information (Harvard Univ. Press 2015).

2. Indian Perspective on adoption of AI in Legal System

In the Indian legal system, scholarly engagement is still emerging but steadily expanding. Madhav (2021) examines early AI adoption in Indian courts, highlighting efficiency gains through tools such as translation services and digital case management, while noting the lack of constitutional and rights-based analysis.⁹ Sharma and Kumar (2022) adopt a more critical approach, acknowledging improvements in legal research and document processing but cautioning against algorithmic bias, particularly in criminal justice systems that may reinforce structural inequalities.¹⁰ Singh (2023) offers a focused constitutional critique, analysing AI's compatibility with Article 14 and warning that algorithmic decision-making may amplify existing caste, class, gender, and religious biases.¹¹ Other scholars address technical methods of bias detection and mitigation in legal AI systems, while recognising that technical interventions alone cannot resolve broader constitutional and social concerns.¹²

Despite growing global and Indian scholarship on algorithmic governance, existing literature in India remains fragmented and largely confined to efficiency gains or a narrow focus on Article 14. There is limited integrated constitutional analysis examining how AI-driven State decision-making impacts not only equality and non-arbitrariness under Article 14, but also due process and personal liberty under Article 21, freedoms under Article 19, and the right to privacy in the context of data-driven surveillance and profiling. Further, insufficient attention has been paid to State responsibility when AI systems are deployed through private actors and to the institutional capacity of courts and administrative bodies to exercise meaningful oversight. This gap necessitates a holistic constitutional evaluation of algorithmic governance in India that situates AI within the broader framework of fundamental rights and democratic accountability.

⁹ Khaneja, M., Uniform Civil Code: A Critical Analysis of Its Application in Contemporary India, *Int'l J. Multidisciplinary Res.* (2024).

¹⁰ Sharma, K., Shukla, P. & Dwivedi, V., Evaluating AI Models in Indian Legal Practice: A Study on Large Language Models, 2024 IEEE 21st India Council Int'l Conf. (INDICON) 1 (2024).

¹¹ Agrawal, I. & Singh, A., Article 16 of the Indian Constitution: Overcoming Past Discriminations, *SSRN* (2016).

¹² Lingam, K. & Chittineni, S., Data-Driven Justice: Survey on Approaches to Identify and Mitigate Biases to Build Fair Artificial Intelligent Models for Indian Justice System, 19 *Intelligent Decision Techs.* 888 (2025).

I. ARTICLE 14 – EQUALITY BEFORE LAW AND NON-ARBITRARINESS

Algorithmic Bias In AI Systems¹³

Algorithmic bias represents one of the most crucial constitutional issues emerging from the use of artificial intelligence systems. AI, especially machine learning algorithms, relies extensively on training datasets to produce outcomes. These datasets are frequently sourced from historical records that embody deep-rooted social inequalities, systemic discrimination, and institutional biases. Consequently, AI systems often replicate and exacerbate existing biases instead of addressing them.

1. Gender bias has been noted in automated hiring systems, where algorithms tend to favour male applicants over female candidates with similar qualifications because of distorted historical employment data. Such behaviour reinforces occupational segregation and diminishes substantive equality.
2. Caste and socio-economic bias is particularly apparent in predictive policing and surveillance algorithms, which disproportionately impact marginalized communities by depending on crime data shaped by years of over-policing and structural discrimination.
3. Language and regional bias is evident in content moderation and speech recognition technologies, where AI models trained mainly on English-language data misunderstand regional languages and dialects, leading to disproportionate content removals and the silencing of non-dominant voices.

These examples of algorithmic bias directly contradict the constitutional promise of equality under Article 14 of the Indian Constitution. By consistently disadvantaging already marginalized groups, biased AI systems perpetuate unequal treatment and reinforce social hierarchies, thereby undermining the principle of non-arbitrariness central to Indian equality jurisprudence.

Predictive Policing and Historical Bias

Several studies critically analyse the use of predictive policing technologies in Indian metropolitan cities such as Delhi and Hyderabad. Pilot initiatives like Delhi's Crime Mapping Analytics and Predictive System (CMAPS) rely on continuous data collection from multiple sources to identify crime-prone areas and predict criminal activity. Similarly, the Hyderabad

¹³ Ram Krishna Mani Tripathi, *AI in Judicial Decision-Making: Opportunities and Challenges*, 8 *Int'l J.L. Mgmt. & Hum.* 2274 (2025).

Police employ data-driven tools through the Integrated People Information Hub, which aggregates personal and biometric data to forecast potential criminal behaviour. Scholars argue that such systems raise serious constitutional concerns, particularly with respect to Article 14, as they risk reinforcing discriminatory policing practices.¹⁴

Academic commentary observes that predictive policing systems rely heavily on historical crime data, which itself reflects longstanding patterns of over-policing of specific communities. This creates a feedback loop wherein communities that were historically subjected to disproportionate surveillance continue to be flagged as “high-risk,” thereby perpetuating institutional bias. Scholars caution that such algorithmic reinforcement of existing prejudices undermines the constitutional mandate of equal protection and non-arbitrariness, effectively resulting in digital discrimination under the guise of technological efficiency.

Facial Recognition Technology and Discriminatory Outcomes

Another significant body of literature critiques the use of facial recognition technology (FRT) by law enforcement agencies, including the Delhi Police. Empirical studies conducted by researchers such as Joy Buolamwini and Timnit Gebru demonstrate that facial recognition systems exhibit significantly higher error rates for individuals belonging to marginalised groups. Their research reveals that darker-skinned women are particularly vulnerable to misclassification, with error rates as high as 34.7%, compared to error rates of less than 1% for lighter-skinned men.¹⁵

Such inaccuracies can lead to wrongful identification, unlawful detention, and infringement of personal liberty. These outcomes raise serious constitutional concerns, as they amount to indirect State-sanctioned discrimination. While law enforcement agencies in India have claimed accuracy rates of up to 80% in facial recognition deployments, commentators note that even minimal error margins can have severe consequences when applied at scale. The literature thus emphasises that unregulated use of FRT risks violating Article 14 by enabling arbitrary and unequal treatment of individuals based on flawed algorithmic assessments.¹⁶

¹⁴ Ramachandran Murugesan, *Predictive Policing in India: Detering Crime or Discriminating Minorities?*, LSE Human Rights (Apr. 16, 2021), <https://blogs.lse.ac.uk/humanrights/2021/04/16/predictive-policing-in-india-detering-crime-or-discriminating-minorities/>

¹⁵ Joy Buolamwini & Timnit Gebru, *Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification*, in *Proceedings of the 1st Conference on Fairness, Accountability, and Transparency* 77, 77–91 (2018), <https://proceedings.mlr.press/v81/buolamwini18a/buolamwini18a.pdf>

¹⁶ Delhi Police’s FRT Use is 80% Accurate and 100% Scary, Internet Freedom Foundation, Oct. 28, 2020, available at <https://internetfreedom.in/delhi-polices-frt-use-is-80-accurate-and-100-scary/>

Policy Discourse: NITI Aayog's National Strategy for Artificial Intelligence

Policy-oriented literature frequently refers to NITI Aayog's National Strategy for Artificial Intelligence (2018) as India's foundational document on AI governance. The Strategy articulates a vision of leveraging AI for inclusive growth across sectors such as healthcare, agriculture, education, and smart cities. The Strategy recognises the importance of ethical considerations, transparency, and accountability in algorithmic decision-making, and encourages the development of a robust AI ecosystem through research, innovation, and public-private partnerships.¹⁷

Implications on Criminal Justice System

The integration of Artificial Intelligence into the criminal justice system presents significant constitutional issues, especially concerning the essential rights protected by Articles 14 and 21¹⁸ of the Indian Constitution. The Supreme Court's pivotal ruling in *Justice K.S. Puttaswamy v. Union of India (2017)*¹⁹ serves as the essential constitutional basis for evaluating the legality of the State's deployment of AI-based surveillance and decision-making systems. The Court clearly affirmed that the right to privacy is a fundamental aspect of the right to life and personal liberty under Article 21, stating that any violation must meet the criteria of *legality, necessity, proportionality, and procedural protections* as also interpreted from international human rights agreements such as the *European Convention on Human Rights*, the *General Data Protection Regulation (GDPR)*²⁰, and comparative legal interpretations from the United States. This framework serves as a comprehensive evaluative tool for analysing the validity of AI surveillance systems and digital forensic technologies utilized by law enforcement. As a result, when AI technologies are used to classify individuals as 'potential threats' based on their digital traces or behaviour patterns, such classifications must be strictly regulated, specifically focused, and subject to judicial review.

- Arbitrariness is antithetical to equality.²¹ The issue of algorithmic arbitrariness presents significant doctrinal challenges under Article 14. The majority of AI systems function using proprietary 'black-box' models, which make their decision-making processes

¹⁷ NITI Aayog, National Strategy for Artificial Intelligence (Mar. 2023), <https://www.niti.gov.in/sites/default/files/2023-03/National-Strategy-for-Artificial-Intelligence.pdf>

¹⁸ India Const. art. 21.

¹⁹ Justice K.S. Puttaswamy (Retd.) v. Union of India, (2017) 10 SCC 1.

²⁰ Rachna Yadav & Dr. Rahul Varshney, *Recalibrating the Right to Privacy in the Digital Age: Legal Challenges and Constitutional Safeguards in the Era of Technological Intrusion*, 5 *ShodhKosh: J. Vis. & Perform. Arts* 1958 (2024), <https://doi.org/10.29121/shodhkosh.v5.i6.2024.5121>

²¹ E.P. Royappa v. State of T.N., (1974) 4 SCC 3.

opaque to those impacted²². This lack of transparency prevents individuals from comprehending, contesting, or seeking remedies for negative outcomes. Such a system sharply contrasts with the Supreme Court's decision in *Maneka Gandhi v. Union of India*²³, which asserted that all actions taken by the State must be just, fair, and reasonable, and subject to judicial scrutiny. Consequently, the delegation of discretionary authority to non-transparent algorithmic systems weakens constitutional accountability and diminishes the fundamental assurance against arbitrary actions by the State.

- The principle of proportionality, emphasized in the Puttaswamy case and further detailed in *Modern Dental College v. State of Madhya Pradesh*²⁴, is an essential mechanism for evaluating the constitutionality of limitations on fundamental rights. The proportionality assessment stipulates that any restriction must (i) be prescribed by law, (ii) aim for a legitimate objective of the State, (iii) be essential in a democratic society, and (iv) strike a fair balance between the methods employed and the rights curtailed.

Thus, the implementation of AI surveillance technologies must adhere to each component of this assessment. In the absence of an all-encompassing statutory framework governing surveillance and algorithmic decision-making in India, the legitimacy and proportionality of such technologies appear constitutionally questionable. Furthermore, procedural due process suffers significantly when AI systems are utilized without transparency, accountability, or processes for appeal. The algorithms employed to evaluate bail eligibility, calculate risk scores, or identify suspects frequently lack clarity, effectively barring individuals from challenging the foundations of decisions that directly impact their freedom.

Such actions erode the fundamental principles of procedural fairness and natural justice, which are central to Articles 14 and 21. The right to a fair trial and meaningful judicial review cannot coexist with obscure decision-making processes that protect State actions from examination. As a result, the unregulated use of AI in the criminal justice system poses a risk of turning constitutional governance into a state of automated randomness, which is contrary to the rule of law.

²² Bartosz Brożek, Michał Furman, Marek Jakubiec & Bartłomiej Kucharzyk, *The black box problem revisited. Real and imaginary challenges for automated legal decision making* (2023).

²³ *Maneka Gandhi v. Union of India*, (1978) 1 SCC 248.

²⁴ *Modern Dental College & Research Centre v. Government of India*, 2016 SCC OnLine MP 8010.

II. ARTICLE 19 – DEMOCRATIC FREEDOMS

Algorithmic Moderation and Freedom of Expression

The right to freedom of speech and expression is protected by Article 19(1)(a). There are worries about censorship and the stifling of dissent because AI algorithms used by social media platforms and other digital intermediaries for content moderation may unintentionally stifle free speech. The concepts of free speech and democratic participation are called into question by the opaqueness of algorithmic decision-making procedures.

Right to Explanation

Article 19(1)(a) of the Indian Constitution embraces the right to information as a fundamental right, as held by the Supreme Court in *Union of India v. Association for Democratic Reforms*²⁵. This holding further fortifies the claim that persons affected by algorithmic decision-making have a constitutional right to know the rationale for decisions that affect their rights and interests.

The European Union's AI Act is a comparative example in this respect. By using a risk-based categorization of AI systems, it acknowledges the increased risks associated with high-risk applications and, under Article 86²⁶, confers a right to individuals to obtain a clear and meaningful explanation of the AI system's involvement in decision-making processes. Based on this model, India must require AI systems used in high-risk areas such as healthcare, banking, education, and law enforcement to provide timely, accessible, and understandable explanations for their outputs. This would shift accountability away from technical processes and ensure that algorithmic governance is in line with the constitutional guarantee of transparency and informed participation.

III. ARTICLE 21 – DUE PROCESS, PERSONAL LIBERTY, RIGHT TO PRIVACY AND DATA PROTECTION

Article 21 of the Indian Constitution guarantees that "No person shall be deprived of his life or personal liberty except according to procedure established by law." The Supreme Court has repeatedly interpreted this provision to require that any State interference with personal liberty must be *fair, just, and reasonable*²⁷ effectively incorporating a due-process standard and also

²⁵ Union of India v. Association for Democratic Reforms (2002) 5 SCC 294.

²⁶ Regulation (EU) 2024/1689 of the European Parliament and of the Council (Artificial Intelligence Act), art. 86.

²⁷ Maneka Gandhi v. The Union of India, AIR 1978 SC 597.

recognises three-pronged test for permissible State intrusion into personal data: *legality, necessity, and proportionality*²⁸ within Indian constitutional law. When algorithmic systems operate without transparency, meaningful human oversight, or procedural safeguards, they risk violating the core due-process values embedded in Article 21.

The Black Box problem

A central concern in algorithmic governance is opacity, often described as the “black box” problem, wherein the internal logic of AI systems remains inaccessible to those affected by their decisions. Individuals subjected to algorithm-driven outcomes may be unable to ascertain why a particular action such as the imposition of a traffic penalty or heightened police scrutiny was taken against them. This lack of transparency and accountability fosters perceptions of arbitrariness and directly undermines the due process guarantees embedded in Article 21 of the Indian Constitution. Since Article 21 mandates that any deprivation of life or personal liberty must follow a fair, just, and reasonable procedure, decision-making systems that operate without explainability or avenues for review threaten the constitutional commitment to unbiased, transparent, and accountable governance.

Personal Data Protection

The Supreme Court established privacy as a basic right under Article 21 of the Indian Constitution, establishing a precedent for personal data protection. In India, the regulation of artificial intelligence and algorithmic governance remains a developing and contested legal terrain. While the enactment of the **Digital Personal Data Protection Act, 2023** marks a significant advancement in safeguarding personal data, the broader regulatory framework governing AI remains fragmented and insufficient. Existing legal instruments primarily address issues of data protection and consent, leaving wider concerns relating to algorithmic governance such as bias, transparency, accountability, and exclusion largely unregulated. The deployment of AI in welfare administration, such as the **Samagra Vedika** system in Telangana, illustrates these concerns, where algorithmic filtering reportedly resulted in the exclusion of marginalised individuals from social security benefits. Such outcomes reveal how ostensibly neutral technologies can reproduce and entrench structural inequalities²⁹.

²⁸ Justice K.S. Puttaswamy & Anr. vs. Union of India & Ors. (2017) 10 SCC 1.

²⁹ *Invisible Hand of Code: Reimagining Constitutionalism in the Age of Algorithms*, NLIU Law Review (Jan. 27, 2025).

IV. INTERNATIONAL CASE STUDIES

1. **R (Bridges) v. Chief Constable of South Wales Police (UK, 2020)**³⁰ The Court of Appeal found that the South Wales Police (SWP) failed to ensure that the facial recognition software used was free from demographic bias (specifically regarding race and gender). It was the first case in the world to find a police force's use of Live Facial Recognition (LFR) unlawful.
2. **Netherlands “SyRI” Case (2020)**³¹ The Hague District Court ruled that the “System Risk Indication” (SyRI) violated **Article 8 of the ECHR** (Right to Privacy). The court noted a “deep imbalance” between the state’s interest in fraud detection and the citizens’ right to privacy, especially since the algorithm targeted “problem neighborhoods.”
3. **Houston Federation of Teachers v. Houston ISD (USA, 2017)**³²
The court ruled that using a “black box” algorithm (the EVAAS system) to terminate teachers violated the 14th Amendment’s Due Process Clause. Because the algorithm was proprietary (owned by SAS Institute), teachers could not meaningfully challenge their “scores” or the grounds for their firing.
4. **Schufa Credit Scoring Case (Germany/EU, 2023)**³³ On December 7, 2023, the Court of Justice of the European Union (CJEU) issued a definitive ruling. It held that an automated credit score constitutes Automated Decision-Making (ADM) under Article 22 of the GDPR if the bank or lender relies on that score as the primary or “decisive” factor for granting a loan.
5. **Robodebt Scheme Case (Australia, 2019–2020)**³⁴ The “Online Compliance Intervention” system was ruled unlawful because “income averaging” (assuming a yearly average applied to every fortnight) was not a valid legal basis for debt. The Amato case led to a settlement where the government refunded roughly \$1.8 billion AUD in debts.

³⁰ [2020] EWCA Civ 1058.

³¹ ECLI:NL:RBDHA:2020:1878.

³² 251 F. Supp. 3d 1168 (S.D. Tex. 2017).

³³ Case C-634/21.

³⁴ [2019] FCA (Orders by Consent, VID1118/2019).

V. CURRENT AI IMPLEMENTATIONS IN THE INDIAN JUDICIARY

1. SUVAS: Translation and Access to Justice

The Supreme Court's *SUVAS* (*Supreme Court Vidhik Anuvaad Software*) constitutes one of the most prominent uses of artificial intelligence within the Indian judiciary. The system is designed to translate judicial proceedings and legal documents from English into regional languages, with the objective of overcoming linguistic barriers that have historically restricted access to justice for non-English-speaking populations. From a constitutional standpoint, SUVAS advances the equality mandate under Article 14 by promoting linguistic inclusivity and facilitating broader access to judicial processes. By enabling comprehension across diverse linguistic communities, the system has the potential to reduce structural disadvantages rooted in language.³⁵

Nevertheless, even translation-based AI systems are not free from constitutional concerns. Variations in training data across languages or dialects may result in unequal translation accuracy, disproportionately affecting certain communities. Moreover, legal translation entails interpretive judgments, and algorithmic biases in such interpretation could influence the understanding of legal rights and obligations, thereby affecting case outcomes.

2. e-Courts and AI-Enabled Case Management Systems

The wider e-Courts initiative employs AI-driven tools for functions such as case classification, scheduling, and docket management, with the stated aim of enhancing administrative efficiency and reducing judicial delays.³⁶

Although these systems may appear administratively neutral, they nonetheless raise significant equality and due process considerations. Algorithmic prioritisation of cases or litigants may result in differential access to timely justice, while errors in case categorisation particularly in matters involving marginalised groups could lead to inappropriate procedural handling. Such outcomes risk undermining the constitutional commitment to fairness, non-arbitrariness, and equal treatment within the judicial process.

³⁵ A. G. & S. D., Greening the Justice System: Assessing the Legality, Feasibility, and Potential of Artificial Intelligence in Advancing Environmental Sustainability Within the Indian Judiciary, *Frontiers in Political Sci.* (2025), <https://doi.org/10.3389/fpos.2025.1553705>

³⁶ Amy J. Schmitz, Expanding Access to Remedies Through E-Court Initiatives, *Consumer L. eJournal* (2019).

VI. COMPARATIVE PERSPECTIVE

1. European Union: A Rights-Centric Regulatory Model³⁷

The European Union's regulatory approach to artificial intelligence, as reflected in the proposed *AI Act*, offers valuable guidance for jurisdictions seeking to balance technological innovation with fundamental rights protection. The EU framework adopts a risk-based classification system, categorising AI applications according to the level of potential harm they pose. Notably, AI systems used in judicial and law enforcement contexts are designated as "high-risk," thereby subjecting them to enhanced regulatory scrutiny.

Key features of this framework include mandatory risk and impact assessments, transparency and explainability obligations, requirements for meaningful human oversight, and standards for accuracy, robustness, and reliability. Additionally, the framework mandates conformity assessments and continuous monitoring of high-risk AI systems throughout their lifecycle. For India, this model demonstrates the feasibility of proactive, rights-oriented regulation and offers a template that could be adapted to address India's unique constitutional concerns, particularly those arising from deep social and structural inequalities.

2. United States: Judicial Caution and Post-Deployment Oversight³⁸

The United States provides an instructive example of extensive, though fragmented, use of algorithmic tools within the criminal justice system. Risk assessment algorithms employed in bail and sentencing decisions have been widely adopted but have also sparked sustained debate due to documented concerns regarding racial bias and lack of transparency. Judicial engagement with these systems has underscored the constitutional tensions between efficiency and procedural fairness.

The American experience illustrates the importance of disclosure of algorithmic limitations, validation of decision-making tools, and ongoing monitoring to prevent discriminatory outcomes. It further demonstrates how constitutional challenges and public scrutiny can play a

³⁷ Stuurman, K. & Lachaud, E., Regulating AI: A Label to Complete the Proposed Act on Artificial Intelligence, 44 Computer L. & Sec. Rev. 105657 (2022), <https://doi.org/10.1016/j.clsr.2022.105657>.

³⁸ Aziz Huq, Racial Equity in Algorithmic Criminal Justice, 68 Duke L.J. 1043 (2019).

critical role in shaping regulatory responses and improving governance standards for AI in legal contexts.

3. China: Technological Efficiency and Rights Trade-Office³⁹

China's deployment of AI within its "smart courts" system represents one of the most extensive uses of artificial intelligence in judicial administration worldwide. AI tools are employed for tasks such as case filing, evidence analysis, and, in limited contexts, assistance in drafting judicial decisions.

While this model has delivered significant gains in administrative efficiency and case disposal rates, it has drawn criticism for insufficient safeguards for individual rights, transparency, and procedural fairness. The Chinese experience highlights the technical potential of AI-driven judicial systems but simultaneously serves as a cautionary example of the risks associated with prioritising efficiency over constitutional and rights-based considerations.

SUGGESTIONS

1. Adopt a Comprehensive Rights-Based AI Framework

There's a need to move ahead of a data-protection-centric approach and adopt a holistic, rights-based regulatory framework for artificial intelligence. Constitutional principles of equality, liberty, dignity, and fair processes need to be established on the AI governance, whereby technological efficiency does not dominate the basic rights.

2. Statutory Regulation of High-Risk AI Systems

The application of AI systems in areas with high stakes, like welfare disbursement, law enforcement, surveillance, and adjudication should undergo specific statutory regulation. These systems should be pre-authorised, monitored and audited on a regular basis with regards to constitutional compliance.

³⁹ Gong, N., Judicial Application and Limitations of Artificial Intelligence, Vestnik St. Petersburg Univ. L. (2025), <https://doi.org/10.21638/spbu14.2025.117>.

3. Mandatory Transparency and Right to Explanation

The State authorities and developers of the AI should be obliged by the law to make the algorithmic decision on individual rights explainable. People should be able to access clear, timely, and intelligible description of automated decision making and especially when the effects of the automated decision encourages liberty, livelihood, or access to the services of the community.

4. Human-in-the-Loop Safeguards

The systems of AI cannot be allowed to act as decision-makers but merely as decision-support tools. The ardent human supervision must be obligatory in all the critical steps of algorithmic management to avoid automation bias and to maintain responsibility in Article 14 and 21.

5. Algorithmic Impact Assessments (AIAs)

Prior to deployment, Algorithmic Impact Assessments of the possible dangers to equality, privacy, due process, and free expression should be carried out by the public authorities. Special consideration in these assessments should be on unequal effects on marginalised and vulnerable communities.

6. Independent Oversight and Accountability Mechanisms

A technical and constitutional expert regulatory body ought to be created to control the application of AI in the governance of the people. This institution ought to be able to audit, suspend or ban AI systems that do not satisfy the constitutional norms.

7. Judicial and Administrative AI Literacy

It is necessary to introduce continuous training programmes to judges, administrators, and law-enforcement officials to improve their AI literacy. To avoid blindly relying on automated systems, it is important to understand algorithmic bias, explainability, and constitutional risks to preserve judicial independence.

8. Regulation of Private Platforms Performing Public Functions

In a situation where the access to employment, credit, speech or welfare is largely shaped by privately-operating AI platforms, the State must provide constitutional parameters of non-discrimination, fairness, and transparency by regulating such platforms appropriately, as part of its positive duties.

9. Inclusive and Context-Sensitive AI Design

AI systems used in governance must be designed with sensitivity to India's social diversity. Incorporating feminist, anti-caste, and decolonial perspectives is essential to ensure that algorithmic governance does not replicate or deepen existing structural inequalities.

CONCLUSION

The increasing use of algorithmic systems in governance marks a decisive shift towards algocracy, raising serious constitutional concerns. While AI promises efficiency and consistency, its opacity, potential bias, and lack of accountability threaten core principles of equality, due process, and fairness. Algorithmic decision-making, particularly in welfare delivery, policing, and judicial administration, risks reproducing existing social inequalities and undermining reasoned, human-centred governance.

India's current regulatory framework, is inadequate to address these broader constitutional challenges. Comparative experiences from the European Union, the United States, and China demonstrate that technological adoption without robust rights-based safeguards can erode procedural fairness and democratic accountability. As algorithmic tools increasingly influence state action, constitutional scrutiny becomes indispensable.

The central challenge for India is not whether to adopt AI, but how to constitutionalise its use. A rights-based, transparent, and accountable framework grounded in human oversight and contextual sensitivity is essential to ensure that AI strengthens governance without compromising the constitutional promise of justice, dignity, and equality.

REFERENCES**Indian Case Law**

1. Justice K.S. Puttaswamy (Retd.) v. Union of India, (2017) 10 SCC 1.
2. Maneka Gandhi v. Union of India, (1978) 1 SCC 248.
3. E.P. Royappa v. State of Tamil Nadu, (1974) 4 SCC 3.
4. Modern Dental College and Research Centre v. State of Madhya Pradesh, (2016) 7 SCC 353.
5. Union of India v. Association for Democratic Reforms, (2002) 5 SCC 294.
6. PUCL v. Union of India, (1997) 1 SCC 301.
7. Anuradha Bhasin v. Union of India, (2020) 3 SCC 637.
8. Faheema Shirin v. State of Kerala, 2019 SCC OnLine Ker 297.
9. Manohar Lal Sharma v. Union of India (Pegasus Case), (2021) 10 SCC 1.
10. Internet Freedom Foundation v. Ministry of Home Affairs, W.P.(C) 1125/2021 (Delhi High Court, pending).

Foreign Case Law & Regulatory Decisions

11. State v. Loomis, 881 N.W.2d 749 (Wis. 2016) (USA).
12. R (Bridges) v. Chief Constable of South Wales Police, [2020] EWCA Civ 1058 (UK).
13. NJCM v. State of the Netherlands (SyRI Case), ECLI:NL:RBDHA:2020:1878.
14. Houston Federation of Teachers v. Houston Independent School District, 251 F. Supp. 3d 1168 (S.D. Tex. 2017).
15. SCHUFA Holding AG v. OQ, Case C-634/21 (CJEU, 2023).
16. Amato v. Commonwealth (Robodebt Case), FCA 2019/2020 (Australia).
17. Italian Data Protection Authority v. Deliveroo, Decision No. 234 (2021).
18. CNIL Decision – Hélène Berr Foundation v. France (Discriminatory Algorithmic Scoring).

Statutes, Regulations & Policy Documents

19. Constitution of India, 1950.
20. Digital Personal Data Protection Act, 2023 (India).
21. European Union, *Artificial Intelligence Act* (Provisional Text, 2024).

22. Regulation (EU) 2016/679 – General Data Protection Regulation (GDPR).
23. NITI Aayog. (2018). *National Strategy for Artificial Intelligence: #AIforAll*.
24. Supreme Court of India. *SUVAS (Supreme Court Vidhik Anuvaad Software)* Initiative.
25. Government of India. *e-Courts Mission Mode Project*.

Books, Articles and Research Papers

26. Susskind, R. (2019). *Online Courts and the Future of Justice*. Oxford University Press.
27. Pasquale, F. (2015). *The Black Box Society*. Harvard University Press.
28. Calo, R. (2015). The Boundaries of Privacy Harm. *Indiana Law Journal*, 86(3).
29. Diakopoulos, N. (2016). Accountability in Algorithmic Decision Making. *Communications of the ACM*, 59(2).
30. Buolamwini, J., & Gebru, T. (2018). Gender Shades. *Proceedings of Machine Learning Research*, 81.
31. Madhav, R. (2021). Artificial Intelligence and the Indian Judiciary. *Indian Journal of Law and Technology*, 17.
32. Sharma, A., & Kumar, R. (2022). Algorithmic Decision-Making in Indian Legal Systems. *NUJS Law Review*, 15(2).
33. Singh, P. (2023). Algorithmic Equality and Article 14. *Indian Law Review*, 7(1).
34. Gupta, S., & Verma, N. (2022). Bias Detection in Legal AI Systems. *Journal of Law and Technology*.
35. Aziz Huq, Racial Equity in Algorithmic Criminal Justice, 68 Duke L.J. 1043 (2019).
36. Gong, N., Judicial Application and Limitations of Artificial Intelligence, Vestnik St. Petersburg Univ. L. (2025), <https://doi.org/10.21638/spbu14.2025.117>
37. Amy J. Schmitz, Expanding Access to Remedies Through E-Court Initiatives, Consumer L. eJournal (2019).
38. Stuurman, K. & Lachaud, E., Regulating AI: A Label to Complete the Proposed Act on Artificial Intelligence, 44 Computer L. & Sec. Rev. 105657 (2022),
39. A. G. & S. D., Greening the Justice System: Assessing the Legality, Feasibility, and Potential of Artificial Intelligence in Advancing Environmental Sustainability Within the Indian Judiciary, *Frontiers in Political Sci.* (2025), <https://doi.org/10.3389/fpos.2025.1553705>

40. Ramachandran Murugesan, *Predictive Policing in India: Deterring Crime or Discriminating Minorities?*, LSE Human Rights (Apr. 16, 2021), <https://blogs.lse.ac.uk/humanrights/2021/04/16/predictive-policing-in-india-deterring-crime-or-discriminating-minorities/>
41. Joy Buolamwini & Timnit Gebru, *Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification*, in *Proceedings of the 1st Conference on Fairness, Accountability, and Transparency* 77, 77–91 (2018),
42. Agrawal, I. & Singh, A., *Article 16 of the Indian Constitution: Overcoming Past Discriminations*, SSRN (2016).
43. Lingam, K. & Chittineni, S., *Data-Driven Justice: Survey on Approaches to Identify and Mitigate Biases to Build Fair Artificial Intelligent Models for Indian Justice System*, 19 *Intelligent Decision Techs.* 888 (2025).

Reports, Blogs & Online Sources

35. European Commission, High-Level Expert Group on AI. (2019). *Ethics Guidelines for Trustworthy AI*.
36. LiveLaw. (2024). *Towards a Rights-Based AI Framework in India*. <https://www.livelaw.in/lawschool/articles/towards-rights-based-ai-framework-india-bridging-global-models-constitutional-duties-298896>
37. NLIU Law Review Blog. (2023). *Invisible Hand of Code: Reimagining Constitutionalism in the Age of Algorithms*. <https://nliulawreview.nliu.ac.in/blog/invisible-hand-of-code-reimagining-constitutionalism-in->