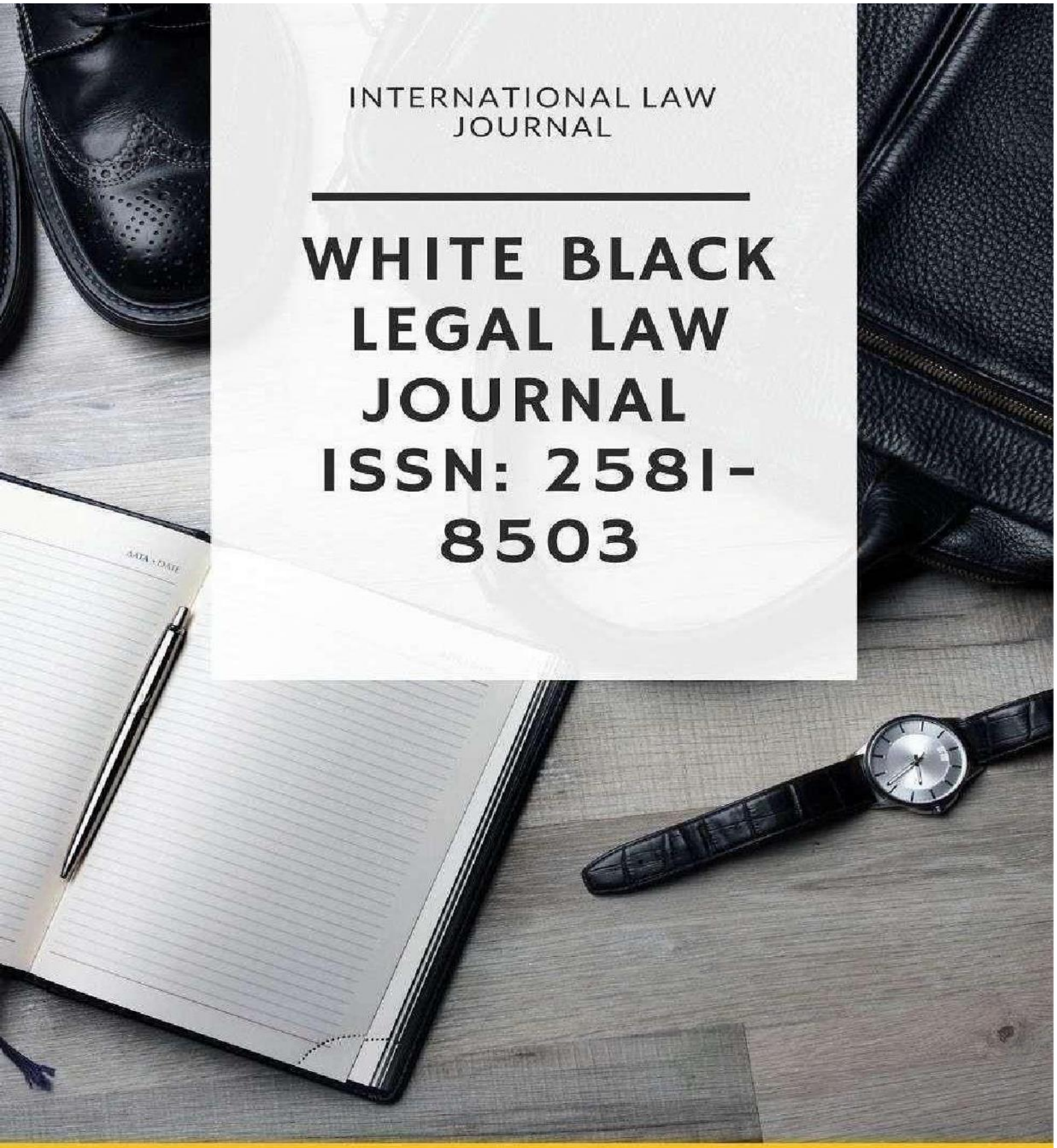

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ALGORITHMIC BIAS AND EQUALITY BEFORE LAW: A SOCIO-LEGAL ANALYSIS OF ARTIFICIAL INTELLIGENCE IN GOVERNANCE[1]

AUTHORED BY - SHREYA GOYAL

Abstract

The increasing integration of Artificial Intelligence (AI) into governmental decision-making has transformed public administration and governance across the world. AI-based technologies are being employed in areas such as welfare distribution, predictive policing, judicial administration, surveillance, recruitment, and public service delivery. While these technologies promise efficiency, objectivity, and enhanced administrative capacity, they also raise significant concerns regarding fairness, accountability, transparency, and equality before law. Algorithms are not inherently neutral; they often reflect and reproduce existing social prejudices embedded in historical data and institutional practices. Consequently, algorithmic decision-making may disproportionately affect vulnerable and marginalized groups, leading to discriminatory outcomes that undermine constitutional guarantees of equality.

From a socio-legal perspective, algorithmic bias raises important concerns regarding equality, accountability, and constitutional governance. The increasing reliance on AI systems in governance necessitates a critical examination of whether algorithmic decisions satisfy these constitutional requirements.

This paper seeks to analyse the phenomenon of algorithmic bias through a socio-legal lens by examining the relationship between artificial intelligence, governance, and constitutional values. It evaluates the manifestations of bias in predictive policing, facial recognition technologies, welfare administration, and public employment systems. The study further explores comparative approaches adopted by jurisdictions such as the European Union and the United States and assesses the adequacy of existing Indian legal frameworks in addressing algorithmic discrimination. The paper argues that transparency, accountability, and human

[1]Shreya Goyal, Advocate at KK Malhotra & Co, Karkardooma District Court, Delhi, India, email: shreyagoyal0230@gmail.com

oversight are essential to ensure that AI-driven governance remains consistent with constitutional principles.

Keywords: Artificial Intelligence, Algorithmic Bias, Equality Before Law, Governance, Constitutionalism, Socio-Legal Analysis, Accountability.

Introduction

Technological developments have fundamentally transformed the nature of governance in the twenty-first century. Artificial Intelligence (AI), machine learning, and automated decision-making systems have increasingly become integral components of public administration across the globe. Governments employ these technologies to enhance efficiency, reduce administrative burdens, improve public service delivery, and facilitate evidence-based policymaking. [2]AI-driven systems are being utilized in areas ranging from criminal justice and taxation to welfare administration and recruitment processes.[3]

Despite their apparent neutrality, algorithms are not immune from bias. AI systems derive their functioning from historical data, human inputs, and institutional assumptions. Consequently, they may reproduce existing social inequalities and prejudices rather than eliminate them.[4] The concern becomes particularly significant when algorithmic decisions influence matters involving liberty, employment, social welfare, or access to justice. The use of predictive policing software, facial recognition technologies, and automated eligibility systems has generated widespread debates regarding fairness and discrimination.[5]

The notion of equality before law occupies a central place within constitutional democracies. In India, Article 14 guarantees equality before law and equal protection of laws, while Article 21 safeguards life and personal liberty through principles of procedural fairness and due process.[6] These constitutional guarantees require state action to be non-arbitrary, transparent, and reasonable. The deployment of opaque AI systems by governmental authorities raises

[2] Klaus Schwab, *The Fourth Industrial Revolution* 135 (World Economic Forum, 2016).
[3] Cary Coglianese & David Lehr, "Regulating by Robot: Administrative Decision Making in the Machine-Learning Era," 105 *Georgetown Law Journal* 1147, 1150 (2017).
[4] Cathy O'Neil, *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy* 3 (Crown Publishing, 2016).
[5] Virginia Eubanks, *Automating Inequality: How High-Tech Tools Profile, Police and Punish the Poor* 7 (St. Martin's Press, 2018).
[6] Constitution of India, arts. 14 and 21.

important questions regarding accountability and constitutional legitimacy.[7]

International developments further highlight the urgency of this issue. The European Union has emphasized trustworthy and human-centric AI through regulatory initiatives and ethical frameworks.[8] In the United States, concerns regarding discriminatory algorithms have prompted extensive debates concerning due process and civil rights.[9] In India, however, the legal framework governing AI remains fragmented and largely dependent upon constitutional principles and sector-specific regulations.[10]

The present study seeks to examine algorithmic bias and its implications for equality before law from a socio-legal perspective. It analyses the theoretical foundations of algorithmic discrimination, evaluates constitutional principles governing state action, and explores the regulatory responses adopted in comparative jurisdictions. The paper argues that technological advancement must be accompanied by robust mechanisms of transparency, accountability, and human oversight to ensure that artificial intelligence serves as an instrument of justice rather than a source of inequality.

Research Questions

The present study seeks to address the following research questions:

1. What is the nature and scope of algorithmic bias in artificial intelligence-based governance systems?
2. How does algorithmic decision-making affect the constitutional principle of equality before law and equal protection of laws?
3. To what extent do existing legal frameworks adequately address issues of transparency, accountability, and discrimination arising from AI-driven governance?
4. What socio-legal factors contribute to the reproduction of social inequalities through automated systems?
5. What lessons can India derive from comparative international approaches to regulate algorithmic bias?

[7] Frank Pasquale, *The Black Box Society: The Secret Algorithms that Control Money and Information* 18 (Harvard University Press, 2015).
[8] European Commission, *Ethics Guidelines for Trustworthy Artificial Intelligence* (2019).
[9] Solon Barocas & Andrew D. Selbst, "Big Data's Disparate Impact," 104 *California Law Review* 671, 674 (2016).
[10] Ministry of Electronics and Information Technology, Government of India, *National Strategy for Artificial Intelligence* (NITI Aayog, 2018).

6. How can regulatory mechanisms and constitutional safeguards ensure that AI-based governance remains consistent with democratic values and the rule of law?

Hypothesis

The study proceeds on the hypothesis that although artificial intelligence possesses the potential to enhance administrative efficiency and improve governance, algorithmic systems are not inherently neutral. They frequently reflect existing social prejudices and structural inequalities embedded within historical data and institutional practices. Consequently, the unregulated use of artificial intelligence in governance may undermine the constitutional guarantee of equality before law and lead to discriminatory outcomes. Effective legal regulation, transparency, accountability mechanisms, and human oversight are therefore indispensable for ensuring that AI-driven governance remains compatible with constitutional values and principles of social justice.[11]

Objectives of the Study

The principal objectives of the study are:

1. To examine the concept and dimensions of algorithmic bias in artificial intelligence systems.
2. To analyse the relationship between AI-driven governance and the constitutional principle of equality before law.
3. To evaluate the socio-legal implications of algorithmic discrimination upon vulnerable and marginalized communities.
4. To study the adequacy of existing legal and regulatory frameworks governing artificial intelligence.
5. To undertake a comparative analysis of international approaches toward algorithmic accountability.
6. To propose recommendations for developing a transparent, accountable, and rights-oriented framework for artificial intelligence governance in India.

[11] Solon Barocas & Andrew D. Selbst, "Big Data's Disparate Impact," 104 *California Law Review* 671, 673 (2016).

Research Methodology

The present study adopts a doctrinal and analytical methodology. The research is primarily based upon secondary sources, including books, journal articles, reports of international organizations, policy documents, constitutional provisions, and judicial decisions. An interdisciplinary approach has been employed to understand the interaction between law, technology, and society.[12]

The study further incorporates a comparative analysis of regulatory frameworks adopted by jurisdictions such as the European Union and the United States. The socio-legal approach enables an examination of algorithmic bias not merely as a technological issue but as a phenomenon shaped by social inequalities and institutional structures. Through critical analysis, the study seeks to evaluate whether existing constitutional safeguards are sufficient to protect individuals from discriminatory outcomes resulting from automated decision-making systems.[13]

Literature Review

The emergence of artificial intelligence and automated decision-making has attracted considerable scholarly attention. Existing literature reveals that algorithmic systems, despite their appearance of objectivity, frequently reproduce and amplify social inequalities. Scholars have increasingly emphasized the need for legal regulation and constitutional oversight to prevent discriminatory outcomes.

Cathy O'Neil, in her seminal work *Weapons of Math Destruction*, argues that algorithms possess the ability to perpetuate inequality by relying on flawed data and opaque processes. According to O'Neil, predictive models often affect vulnerable populations disproportionately and escape meaningful accountability.[14] The author demonstrates how algorithmic systems influence employment, education, policing, and credit markets, thereby creating systemic disadvantages.

Frank Pasquale, in *The Black Box Society*, highlights the opacity surrounding algorithmic

[12] H. M. Hennink, I. Hutter & A. Bailey, *Qualitative Research Methods* 10 (SAGE Publications, 2011).
[13] Roger Cotterrell, *The Sociology of Law: An Introduction* 21 (Butterworths, 1992).
[14] Cathy O'Neil, Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy 3–5 (Crown Publishing, 2016).

decision-making and argues that secrecy in digital governance undermines democratic accountability. He contends that algorithmic systems should be subjected to legal scrutiny and transparency obligations comparable to those imposed upon governmental institutions.[15]

Virginia Eubanks examines the relationship between technology and social exclusion in *Automating Inequality*. Through empirical case studies, she demonstrates how automated welfare systems and predictive technologies often reinforce existing patterns of poverty and marginalization. Rather than eliminating bias, technological systems frequently reproduce historical inequalities embedded in administrative structures.[16]

Solon Barocas and Andrew Selbst analyse the discriminatory effects of big data analytics and argue that facially neutral algorithms may produce disparate impacts upon protected groups. Their work emphasizes the inadequacy of traditional anti-discrimination laws in addressing algorithmic harms.[17]

Ruha Benjamin advances a critical socio-legal perspective by illustrating how technological systems replicate racial and structural inequalities. She introduces the concept of the "New Jim Code" to explain how seemingly neutral technologies may reinforce existing forms of social domination.[18]

Although substantial scholarship exists regarding algorithmic fairness and technological ethics, comparatively limited attention has been devoted to examining these issues through the lens of constitutional equality and socio-legal theory, particularly within the Indian context. The present study seeks to bridge this gap by analysing algorithmic bias as a challenge to equality before law and democratic governance.

1.1 Conceptual Framework: Algorithmic Bias and Equality Before Law

Artificial Intelligence (AI) refers to the capability of computer systems to perform tasks that ordinarily require human intelligence, including learning, prediction, decision-making, and

[15] Frank Pasquale, The Black Box Society: The Secret Algorithms that Control Money and Information 18–22 (Harvard University Press, 2015).
[16] Virginia Eubanks, Automating Inequality: How High-Tech Tools Profile, Police and Punish the Poor 10–15 (St. Martin's Press, 2018).
[17] Solon Barocas & Andrew D. Selbst, "Big Data's Disparate Impact," 104 California Law Review 671, 677–680 (2016).
[18] Ruha Benjamin, Race After Technology: Abolitionist Tools for the New Jim Code 5–10 (Polity Press, 2019).

problem-solving. Machine learning algorithms derive their outputs from patterns identified within large datasets. While such systems are often regarded as objective and value-neutral, increasing scholarly evidence demonstrates that algorithmic systems are susceptible to bias and discrimination.[19]

Algorithmic bias may be understood as systematic and unfair discrimination resulting from the design, training, or deployment of automated systems. Such bias may emerge due to flawed datasets, historical inequalities, coding decisions, or institutional assumptions embedded within algorithms.[20]Since machine learning systems rely heavily on historical data, they often reproduce patterns of discrimination that already exist within society. Consequently, rather than eliminating human prejudice, algorithms may merely automate it.[21]

Scholars classify algorithmic bias into several categories:

(a) Data Bias: Data bias arises when datasets used to train AI systems contain historical inequalities or are unrepresentative of the target population. For instance, biased crime statistics may lead predictive policing algorithms to disproportionately target marginalized communities.[22]

(b) Sampling Bias: Sampling bias occurs when certain groups are underrepresented in the training data. Facial recognition technologies have often exhibited higher error rates when identifying women and racial minorities because of inadequate representation in datasets.[23]

(c) Design Bias: Algorithmic outcomes are influenced by human choices concerning variables, classifications, and objectives. These choices may unintentionally incorporate social stereotypes and institutional preferences into technological systems.[24]

(d) Automation Bias: Automation bias refers to the tendency of decision-makers to rely excessively upon algorithmic recommendations while overlooking contextual factors and human judgment. Such dependence creates risks of arbitrary decision-making and undermines procedural fairness.[25]

[19] Stuart Russell & Peter Norvig, *Artificial Intelligence: A Modern Approach* 1 (4th ed., Pearson, 2021).
[20] Sandra Wachter, Brent Mittelstadt & Chris Russell, "Why Fairness Cannot Be Automated," 41 *Harvard Journal of Law & Technology* 1, 3 (2020).
[21] Cathy O'Neil, *Weapons of Math Destruction* 21 (Crown Publishing, 2016).
[22] Andrew Guthrie Ferguson, *The Rise of Big Data Policing* 45 (NYU Press, 2017).
[23] Joy Buolamwini & Timnit Gebru, "Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification," 81 *Proceedings of Machine Learning Research* 1, 7 (2018).
[24] Frank Pasquale, *The Black Box Society* 35 (Harvard University Press, 2015).
[25] Danielle Keats Citron, "Technological Due Process," 85 *Washington University Law Review* 1249, 1255 (2008).

The principle of equality before law occupies a foundational position within constitutional democracies. Rooted in the Diceyan conception of the rule of law, equality before law requires that all individuals be subject to the same legal standards without arbitrary discrimination.[26]The Indian Constitution embodies this principle under Article 14, which guarantees equality before law and equal protection of laws. Unlike formal equality, modern constitutional jurisprudence emphasizes substantive equality, requiring the State to eliminate structural disadvantages and ensure fairness in governance,[27]

Algorithmic bias presents a direct challenge to these constitutional principles. If AI systems generate discriminatory outcomes against certain communities, governmental reliance on such systems may amount to arbitrary state action prohibited under Article 14. Consequently, algorithmic accountability must be examined not merely as a technological concern but as a constitutional imperative.[28]

1.2 Artificial Intelligence in Governance: Global and Indian Context

The use of artificial intelligence in governance has expanded rapidly across jurisdictions. Governments increasingly rely upon AI-based technologies to improve efficiency, reduce administrative costs, and facilitate evidence-based decision-making. AI applications are now employed in taxation, immigration control, criminal justice, welfare administration, healthcare, education, and public employment.[29]

(a) Predictive Policing: Predictive policing systems utilize historical crime data to forecast locations and individuals perceived to be at higher risk of criminal activity. Programs such as COMPAS (Correctional Offender Management Profiling for Alternative Sanctions) in the United States have generated widespread controversy owing to allegations of racial bias. Investigative studies revealed that the software disproportionately classified African-American defendants as high-risk compared to white defendants.[30]

(b) Facial Recognition Technologies: Facial recognition systems are increasingly used for surveillance and law enforcement. However, studies by researchers at the Massachusetts Institute of Technology have demonstrated that these technologies exhibit significantly higher error rates when identifying women and persons belonging

[26] A.V. Dicey, *Introduction to the Study of the Law of the Constitution* 193 (10th ed., Macmillan, 1959).
[27] M.P. Jain, *Indian Constitutional Law* 1047 (9th ed., LexisNexis, 2020).
[28] Tarunabh Khaitan, *A Theory of Discrimination Law* 17 (Oxford University Press, 2015).
[29] World Economic Forum, *AI Government Readiness Report* (2022).
[30] Julia Angwin et al., "Machine Bias," *ProPublica* (2016).

to minority communities.[31] Such inaccuracies raise concerns regarding privacy, equality, and wrongful identification.

(c) Welfare Administration: Several countries employ automated systems to determine eligibility for social welfare benefits. In Australia, the controversial "Robodebt Scheme" generated incorrect debt notices against thousands of citizens due to algorithmic errors. Public criticism and judicial intervention eventually led to the abandonment of the program.[32]

(d) Immigration and Border Control: Automated systems are increasingly utilized to assess visa applications and immigration risks. Critics argue that opaque algorithms may perpetuate racial and socio-economic biases, thereby compromising fairness and due process.[33]

1.3 Artificial Intelligence in India

India has embraced artificial intelligence as a tool for socio-economic development. The NITI Aayog's strategy document *AI for All* identifies healthcare, agriculture, education, smart cities, and mobility as priority sectors for AI deployment.[34]

Various governmental initiatives have integrated AI-based technologies into public administration. These include:

- AI-assisted disease surveillance;
- Smart traffic management systems;
- Automated grievance redressal mechanisms;
- Facial recognition technologies employed by law enforcement agencies;
- AI-supported judicial translation and case management systems.[35]

While these innovations promise administrative efficiency, concerns regarding privacy, transparency, and constitutional accountability remain largely unresolved. Unlike the European Union, India presently lacks a comprehensive legislative framework regulating artificial intelligence and automated decision-making. Consequently, constitutional provisions and judicial doctrines assume particular significance in ensuring that technological governance

[31] Joy Buolamwini & Timnit Gebru, supra note 25, at 8.
[32] Terry Carney, "Robo-Debt Illegality: The Seven Veils of Failed Guarantees of the Rule of Law?", 44 *University of New South Wales Law Journal* 880, 882 (2021).
[33] Karen Yeung, "Algorithmic Regulation: A Critical Interrogation," 12 *Regulation & Governance* 505, 509 (2018).
[34] NITI Aayog, *National Strategy for Artificial Intelligence #AIforAll* (Government of India, 2018).
[35] Ministry of Electronics and Information Technology, Government of India, *Responsible AI for All* (2021).

remains consistent with democratic values.[36]

1.4 Constitutional Dimensions: Equality Before Law and Due Process

The constitutional validity of AI-driven governance must ultimately be tested against the principles embodied in Articles 14 and 21 of the Constitution of India.

In *E.P. Royappa v. State of Tamil Nadu*, the Supreme Court held that arbitrariness is antithetical to equality and that Article 14 strikes at arbitrary state action.[37]This principle was further strengthened in *Maneka Gandhi v. Union of India*, wherein the Court emphasized that fairness and reasonableness constitute essential elements of constitutional governance.[38]

Subsequently, in *Ajay Hasia v. Khalid Mujib Sehravardi*, the Court reiterated that Article 14 prohibits arbitrary exercise of governmental power.[39] Therefore, if algorithmic systems employed by the State produce discriminatory or irrational outcomes, such actions may violate constitutional guarantees of equality.

The Supreme Court's judgment in *Justice K.S. Puttaswamy v. Union of India* recognized privacy as a fundamental right and emphasized the dangers posed by informational asymmetry and technological surveillance.[40] Justice Chandrachud observed that technological advancements should not compromise constitutional freedoms and individual autonomy. These observations assume considerable relevance in the context of AI-based governance.

Furthermore, in *Anuradha Bhasin v. Union of India*, the Court stressed that restrictions imposed through technological means must satisfy standards of proportionality and constitutional scrutiny.[41] The principle of proportionality, increasingly recognized in Indian constitutional jurisprudence, may provide an important framework for evaluating automated governmental decisions.

Thus, constitutional doctrines developed by the Supreme Court furnish important safeguards against arbitrary and discriminatory applications of artificial intelligence. However, existing jurisprudence has yet to directly confront the challenges posed by algorithmic bias and automated decision-making.

[36] Arghya Sengupta & Faiza Rahman, "Artificial Intelligence and Constitutionalism in India," *National Law School of India Review* 31(2), 1–18 (2019).
[37] *E.P. Royappa v. State of Tamil Nadu*, (1974) 4 SCC 3.
[38] *Maneka Gandhi v. Union of India*, (1978) 1 SCC 248.
[39] *Ajay Hasia v. Khalid Mujib Sehravardi*, (1981) 1 SCC 722.
[40] *Justice K.S. Puttaswamy (Retd.) v. Union of India*, (2017) 10 SCC 1.
[41] *Anuradha Bhasin v. Union of India*, (2020) 3 SCC 637.

1.5 Manifestations of Algorithmic Bias in Governance

The deployment of artificial intelligence in public administration has introduced new possibilities for efficiency and innovation. However, numerous instances across the world demonstrate that algorithmic systems are capable of reproducing and reinforcing existing social inequalities. Such biases manifest themselves in multiple domains of governance, including criminal justice, surveillance, welfare administration, and public employment.

(A) Predictive Policing and Criminal Justice: Predictive policing involves the use of statistical models and machine learning techniques to identify individuals or geographical areas considered likely to be associated with criminal activity. Proponents argue that such technologies enhance efficiency and permit optimal allocation of police resources.[42]However, predictive policing systems have attracted severe criticism for reproducing racial and socio-economic disparities embedded within historical crime data. Since policing practices themselves are often unevenly distributed across communities, algorithms trained on such data may disproportionately target already marginalized populations.[43]The controversy surrounding the COMPAS risk assessment software in the United States illustrates this concern. Investigative findings by ProPublica revealed that the algorithm was significantly more likely to incorrectly classify African-American defendants as future offenders than white defendants.[44]Although the software purported to provide objective risk assessments, its outputs reflected patterns of discrimination present within the criminal justice system. From a socio-legal perspective, predictive policing raises concerns regarding the presumption of innocence and the possibility of discriminatory profiling. The use of probability-based assessments may shift the focus from actual conduct to predicted behaviour, thereby undermining traditional principles of criminal jurisprudence.[45] Furthermore, predictive algorithms often lack transparency, making it difficult for accused persons to challenge adverse decisions. Such opacity conflicts with principles of natural justice and procedural fairness.[46]

(B) Facial Recognition Technologies: Facial recognition technology (FRT) has emerged as one of the most controversial applications of artificial intelligence. Governments

[42] Andrew Guthrie Ferguson, *The Rise of Big Data Policing* 33 (NYU Press, 2017).
[43] Bernard E. Harcourt, *Against Prediction: Profiling, Policing and Punishing in an Actuarial Age* 190 (University of Chicago Press, 2007).
[44] Julia Angwin et al., "Machine Bias," *ProPublica* (2016).
[45] Andrew Ashworth & Lucia Zedner, *Preventive Justice* 114 (Oxford University Press, 2014).
[46] Danielle Keats Citron, "Technological Due Process," 85 *Washington University Law Review* 1249, 1262 (2008).

increasingly employ these systems for surveillance, border control, and law enforcement purposes.[47] Studies conducted by Joy Buolamwini and Timnit Gebru demonstrated that commercial facial recognition systems exhibited substantially higher error rates in identifying women and persons belonging to racial minorities.[48]Such inaccuracies can have serious consequences when these technologies are used for criminal investigations and public surveillance. The issue assumed judicial significance in the United States in *Bridges v. State*, where concerns were raised regarding the reliability of facial recognition evidence.[49] Critics argue that inaccurate identification may result in wrongful arrests and violations of due process. In India, several states have experimented with facial recognition technologies for policing and crowd management. However, the absence of a comprehensive legal framework governing their deployment raises concerns regarding privacy and constitutional rights.[50] The Supreme Court's decision in *Justice K.S. Puttaswamy v. Union of India* recognized privacy as an intrinsic part of Article 21 and emphasized the importance of informational autonomy.[51] Consequently, indiscriminate deployment of facial recognition systems without adequate safeguards may conflict with constitutional guarantees of privacy and dignity.

1.6 Constitutional Dimensions of Algorithmic Bias

The doctrine of natural justice constitutes a fundamental component of constitutional governance. The principles of *audi alteram partem* and reasoned decision-making ensure fairness and accountability in administrative processes[52]

Algorithmic systems pose significant challenges to these principles. Automated decisions are frequently opaque, making it difficult for affected individuals to understand the reasons underlying adverse outcomes. This phenomenon has been described as the "black box problem."[53]

Similarly, in *Kranti Associates Pvt. Ltd. v. Masood Ahmed Khan*, the Court observed that

[47] Woodrow Hartzog, Privacy's Blueprint: The Battle to Control the Design of New Technologies 117 (Harvard University Press, 2018).
[48] Joy Buolamwini & Timnit Gebru, "Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification," 81 Proceedings of Machine Learning Research 1, 8 (2018).
[49] Bridges v. State, 2020 WL 3867202 (Md. Ct. Spec. App. 2020).
[50] Apar Gupta & Udbhav Tiwari, "Facial Recognition Technology and Constitutional Freedoms in India," Internet Freedom Foundation (2020).
[51] Justice K.S. Puttaswamy (Retd.) v. Union of India, (2017) 10 SCC 1.
[52] H.W.R. Wade & C.F. Forsyth, Administrative Law 370 (11th ed., Oxford University Press, 2014).
[53] Frank Pasquale, The Black Box Society 3 (Harvard University Press, 2015).

recording reasons is an essential component of natural justice and promotes transparency and accountability[54]

Where algorithmic systems operate in a manner that renders their reasoning inaccessible, affected persons may be deprived of meaningful opportunities to challenge decisions. Such opacity undermines procedural fairness and weakens democratic accountability.[55]

The doctrine of equality before law under Article 14 extends beyond formal equality and encompasses the prohibition of arbitrariness.[56] In *E.P. Royappa v. State of Tamil Nadu*, the Supreme Court declared that arbitrariness and equality are sworn enemies.[57]

Algorithmic discrimination presents a novel form of arbitrariness. Unlike conventional discrimination, digital discrimination often operates indirectly and remains concealed within computational processes. Biases may arise without any explicit intention to discriminate, making their detection and correction particularly difficult.[58]

The concept of substantive equality recognized in Indian constitutional jurisprudence requires the State not merely to avoid overt discrimination but also to address structural disadvantages. Consequently, governmental use of AI systems must conform to constitutional standards of fairness, transparency, and proportionality.[59]

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[54] Kranti Associates Pvt. Ltd. v. Masood Ahmed Khan, (2010) 9 SCC 496.
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