

ALGORITHMIC BIAS IN INDIAN CRIMINAL JUSTICE SYSTEM: A CONSTITUTIONAL CHALLENGE

- Gurneet Singh Chawla¹

Abstract

The assimilation of artificial intelligence (AI) into the Indian criminal justice system through judicial assistance tool, algorithmic policing and facial recognition technology makes a transformative shift in governance while these innovative advancement have potential of efficiency and data driven they also bring forth a risk of algorithmic bias, which perpetuate algorithmic framework and intensify social inequality embedded in historical data. This paper examine the constitutional outcome of such biasness within India, which will evaluate application of “AI in law enforcement” and adjudication is subject to scrutiny under “Article 14 (Right to equality) and Article 21 (Right to life and personal liberty) of the Indian constitution”. This study points out the points on topic which are need to safeguard in India. Such as case study on the use of facial recognition by Delhi police during the protest and the implementation of the Supreme Court SUPACE system illustrates both the opportunities and challenges posed by Artificial Intelligence (AI) in judicial decision. This paper points out that without statutory regulation , algorithmic accountability and transparency , it will be a risk to Indian constitutional values and its justice system, it concludes by giving suggestion or ideas for proper framework for Artificial Intelligence (AI) governance that balance innovation with justice and fundamental rights.

Keywords- Artificial Intelligence (AI), law, governance, right, constitutional and etc.

1. INTRODUCTION

In today's developing world use of technology and artificial intelligence (AI) is increased all

¹ Student at ITM University, Raipur

For general queries or to submit your research for publication, kindly email us at ijalr.editorial@gmail.com

<https://www.ijalr.in/>

© 2025 International Journal of Advanced Legal Research

over the world and as well as on the Indian criminal justice system by implicating automated facial recognition, algorithmic policing and judicial assistance tool such as supreme court SUPACE, By implementing this technology and Artificial Intelligence (AI) it means to promote transparency, enhance efficiency and access to justice. However this implementation or this development also raise concern about accountability, fairness and constitutional validity. A core concern is algorithmic bias system where AI generated system are making error that mirror or magnify existing inequality embedded in past dataset and practices.²

In India there are same incident have emerged which have issue of algorithmic bias like algorithmic policing based on data that may affect class, caste or communal biases, or use of facial recognition by Delhi police during protest. These technologies remain unmonitored it may harm fundamental rights, particularly "Article 14 and Article 21 of the Indian constitution".

This paper will examine the challenges posed by algorithmic bias in the Indian criminal justice system. It debates that the use of it should have fairness and done with the due process of law and argues that it should have proper framework with right based regulatory body and have transparency and accountability.

2. UNDERSTANDING ALGORITHMIC BIAS

Algorithmic bias refers to the systematic and unfair, repeatable errors which are given by Artificial Intelligence (AI) or algorithmic machine learning system which gives result which outcomes are unfair towards any individual or group unlike human judgment, which is interrogated and justified, as algorithmic outcomes have illusion of neutrality while concealing embedded biases and lack in decision making and can give false impression because it gives outcome on assumption and its historical data and it is learning at the process of outcome which can prejudice any caste, class, gender or community in some cases.³

Algorithmic bias can be a bias to society by many ways like data bias in which the outcome is given by Artificial Intelligence (AI) is unfair because of dataset which is imprinted in the system or

² Pasquale FA, *The Black Box Society: The Secret Algorithms That Control Money and Information* 121 (Harvard University Press 2015).

³ Vinit Sharma, 'Artificial Intelligence and Criminal Justice System in India: A Critical Study' (2023) 5(4) IJLPS 156-162.

For general queries or to submit your research for publication, kindly email us at ijalr.editorial@gmail.com

<https://www.ijalr.in/>

© 2025 International Journal of Advanced Legal Research

example if police mostly collect crime from a neighbourhood where area is poor and have high crime rate but because of that dataset AI will assume that type of area or neighbourhood are having higher criminal rate and these are dangerous area (bad data in _____bad prediction out) second biasness Design Bias in the programmers program some things unintentionally or some rule that benefit one group over another or biasness on certain choices. Third is outcome bias, which gives outcomes unfair even after the data or design looked fine for example marginalize group as high risk from previous data

This is because it is a learning system which learns from its past or historical data to learn and work or efficiency but sometimes it may backfire.

3. ARTIFICIAL INTELLIGENCE(AI) IN THE INDIAN CRIMINAL JUSTICE SYSTEM

The incorporation of AI in the Indian criminal justice system is on stage which is developing in India it needs a lot of improvement. In present it is used by police, in investigation and adjudication of the cases. These development are initiate in the system for efficiency, digital transparency and modernization of the procedure of the Indian criminal justice system. However the use of AI in the system hit back and have some major flaws in it which questioned about transparency, accountability and constitutionality.

One of the first development was done by the ministry of home affair by launching crime and criminal tracking network and system (CCTNS) a platform in which FIR, police record and database of criminal across the state was infrastructure for algorithmic policing, data driven decision making. It gives efficiency to system but also creates risk of biasness in system from previous data, like targeting a community by mistake because of the system algorithmic assumption from previous data.⁴

Second development was proposed by the "National Crime Record Bureau (NCRB)" which was "automated facial recognition system" agencies of law enforcement in Delhi, Hyderabad and

⁴Cathy O'Neil, *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy* 165 (Crown 2016).

For general queries or to submit your research for publication, kindly email us at ijalr.editorial@gmail.com

<https://www.ijalr.in/>

© 2025 International Journal of Advanced Legal Research

Uttar Pradesh had installed facial recognition on cameras in public for investigation and crime prevention. But this topic was controversial as during 2019- 2020 anti CAA protest use of facial recognition technology was used by Delhi police to identify protestors which raise concerns about large surveillance and targeting wrong people or community. As studies have shown that facial recognition systems are having high error rates especially in identifying people with darker skin tone, which make particularly problematic in India's demographic landscape.

Third development has been done in judiciary as in 2021 "SUPACE (Supreme Court Portal for Assistance in Court's Efficiency)", reading case file and suggesting relevant precedent. While SUPACE was launched as an assistant tool for judges it sparked debate over independence of judiciary and reliance on algorithmic outcomes.

These examples showcase that AI is not ready to implement in Indian criminal justice system because it needs a constitutional framework and regulation for Artificial Intelligence in law to enforce in the court or in any other enforcement.

Without safeguarding accountability and transparency, these systems or technology may not deliver justice and possess a threat to equality, liberty and fair trial in India.⁵

4. CONSTITUTIONAL DIMENSION

The development of AI in the Indian criminal justice system must be assessed by constitutional framework which guarantees equality, fair trial and liberty. But the use of algorithmic decision making system by police, prosecutors and by court but it did not stand with the bias constitutional right like violating "Article 14 equality before law", Article 21 right to life and personal liberty and "Article 20(3) protection against self-incrimination". This paper discusses about the constitutional right and how it needs a statutory body for implementation in India.

Article 14 – Equality before Law

Article 14 mandates equality before law and equal protection of law but algorithmic decision based system is biased and possess a threat toward certain communities and localities based on

⁵Shivangi Narayan, *Predictive Policing and the Construction of the 'Criminal'* 45-60 (Palgrave Macmillan 2023).

the algorithmic policing and its historical data because it is AI learning machine system which process it outcome on the basis of its historical data as it can unfair towards an individual or community.

In “*State of West Bengal v. Anwar Ali Sarkar*”⁶, the “Supreme Court” held that any procedural arbitrariness in the administration of criminal justice violates Article 14. This reasoning directly extends to algorithmic decision-making systems, which may discriminate or operate without transparency, thereby undermining equality before the law.

As in the case of “*EP Rayappa v. State of Tamil Nadu*”⁷, the “Supreme Court” held that arbitrariness is antithetical to equality. As an AI system which operates without accountability and transparency it is arbitrary violates “Article 14 of Indian constitution”.

Article21– RightTo Life and Personal Liberty

Article 21 has been widely interpreted to include fairness, right to privacy and due process (“*Maneka Gandhi v. Union of India*”⁸, “*KS Puttaswamy v. Union of India*”⁹) the use of facial recognition by Delhi police during the protest have mass surveillance and algorithmic policing to identify the protestors which has no statutory safeguard and intrude upon privacy and liberty, risking wrongful arrest and that was unjustified

The right to fair trial is also part of Article 21 if judges or law enforcement rely on the AI based decision making system then it will compromise the fairness of the cases.

In “*People’s Union for Civil Liberties (PUCL) v. Union of India*”¹⁰, the Court ruled that unauthorized telephone tapping infringes Article 21, emphasizing the necessity of procedural safeguards and privacy protections—principles equally applicable to AI-based surveillance and facial recognition technologies.

Article20(3)–Protection against Self – incrimination

“Article 20 (3) of the Indian constitution” protects individual from being compelled to be witness

⁶ 1952 SCR 284.

⁷ 1974(4) SCC 3.

⁸ AIR 1978 SC 597.

⁹ AIR 2017 SC 4161.

¹⁰ (1997) 1 SCC 301.

For general queries or to submit your research for publication, kindly email us at ijalr.editorial@gmail.com

<https://www.ijalr.in/>

against themselves. The mandatory collection of biometric identification and use of use of algorithmic prediction built on individual digital footprint poses concern about alignment with fundamental safeguard. In the case of “*Selvi v. State of Karnataka*”¹¹ 2010 Supreme Court held that polygraph test and narco – analysis violated Article 20 (3) similarly may apply to compelled participation in AI –based surveillance system.

5. CONCLUSION

The incorporation of AI in the Indian criminal justice system gives both an unparalleled opportunity and a significant challenge. On the other hand AI tools gives efficiency , resource optimization and predictive insight on other hand they risk eroding constitutional rights , entrenching systematic biases and perpetuating discrimination under the technology.

This paper discuss about the algorithmic biasness in the Indian constitution which have flaws on its system which tells that it violate the “Article 14 (equality before law), Article 21 (right to life and personal liberty) and Article 20 (3) (protection against self – incrimination)”. In a society where inequality entrenched on bases of caste, class, religion and gender. The careless deployment of all algorithmic risk amplify the injustice rather than correct it.

AI tools can be only realized if it is worked within the rules and regulation of Indian constitution. AI should support justice and it should not create unfairness and it need strong democratic oversight and regulation. AI must respect and align with the fundamental right of the individual and by doing all this AI can be transformative, power and did not weak constitution equality, transparency and accountability.

REFERENCES

- Pasquale FA, *The Black Box Society: The Secret Algorithms That Control Money and Information* 121 (Harvard University Press 2015).
- Vinit Sharma, ‘Artificial Intelligence and Criminal Justice System in India: A Critical Study’ (2023) 5(4) IJLPS 156-162.

¹¹ 2010 (7) SCC 263.

- Cathy O'Neil, *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy* 165(Crown 2016).
- Shivangi Narayan, *Predictive Policing and the Construction of the 'Criminal'* 45-60 (Palgrave Macmillan 2023).

