ALGORITHMIC BIAS AND DUE PROCESS: SAFEGUARDING FAIR TRIAL RIGHTS IN THE DIGITAL ERA

Prof. Joyce Francis Noronha[1] and Arya Nishikant Vartak[2]

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ABSTRACT

The rapid integration of artificial intelligence (AI) into judicial systems across the globe is clearly transforming the administration of justice. Today, AI-powered technologies automate tasks ranging from evidence review and risk assessment to sentencing recommendations, propelling courts and law enforcement agencies into the digital era. While AI offers the promise of efficiency, speed, and objectivity, mounting evidence reveals that its growing footprint also poses significant threats to fairness and due process, raising urgent ethical, legal, and social considerations.

Recent deployments of algorithms like COMPAS for reoffending prediction and facial recognition tools in policing have exposed grave risks inherent in the current design and application of AI. Notably, empirical studies show that the Black defendants face excessively high-risk compared to white peers, almost twice as likely in some settings.[3] Such disparities underscore how AI systems often replicate—and intensify—the prejudices hidden in historical training data. These problems extend beyond technical error, challenging core fair trial rights and the very foundations of procedural justice.[4]

This research adopts a doctrinal and analytical approach—scrutinizing legal standards, landmark case law, and policy reports—to dissect how algorithmic bias can undermine judicial discretion, transparency, and the inclusive functioning of courts. It explores the erosion of fundamental safeguards in justice systems: transparency of algorithmic operation, mandatory

[1] Prof. Joyce Francis Noronha, *Sonopant Dandekar Shikshan Mandali's Law College, Palghar*.
[2] Arya Nishikant Vartak, *Sonopant Dandekar Shikshan Mandali's Law College, Palghar*.
[3] Julia Angwin et al., Machine Bias: There's Software Used Across the Country to Predict Future Criminals. And It's Biased Against Blacks, *ProPublica* (May 23, 2016), https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing .
[4] Rebecca Wexler, When Is a Computer a Judge? It Depends on How You Define 'Judge', 105 *Cornell L. Rev.* 847, 870–72 (2020).

notification to defendants when AI is used, opportunities for independent review, and accessible avenues for contesting erroneous outcomes. Marginalized communities, usually excluded from both the design and adoption phases of algorithmic systems, are at increased risk of unjust outcomes and diminished opportunities for meaningful participation.

Comparative analysis exposes divergent regulatory strategies. The fragmented approach in the United States offers limited protection against algorithmic bias, despite constitutional guarantees, while European Union regimes strive for harmonized protective standards under statues like the GDPR.[5] *Article 21 of Constitution of India faces new challenges as courts grapple with the opacity of automated decision-making. International frameworks, such as Article 6 of the European Convention on Human Rights (ECHR), are increasingly invoked to guide best practices, but practical gaps remain across jurisdictions.*[6]

Finally, the study argues that protecting fair trial rights today requires robust regulatory frameworks, vigilant oversight, and participatory mechanisms to hold AI systems accountable. That includes transparent algorithmic design, ongoing monitoring to detect bias, and measures that empower defendants and diverse communities to contest automated recommendations. Rather than allowing AI to replace human judgment, justice systems must harness these tools as assistants to support informed decision-making and deliver speedy justice—but never as final adjudicators. Failure to do so risks losing critical rights in translation from courtroom to code.

This evolving landscape calls for collaborative action among lawmakers, technologists, and civil society to develop safeguards that preserve fairness and equality in the digital age, ensuring that technological progress truly serves the cause of justice.

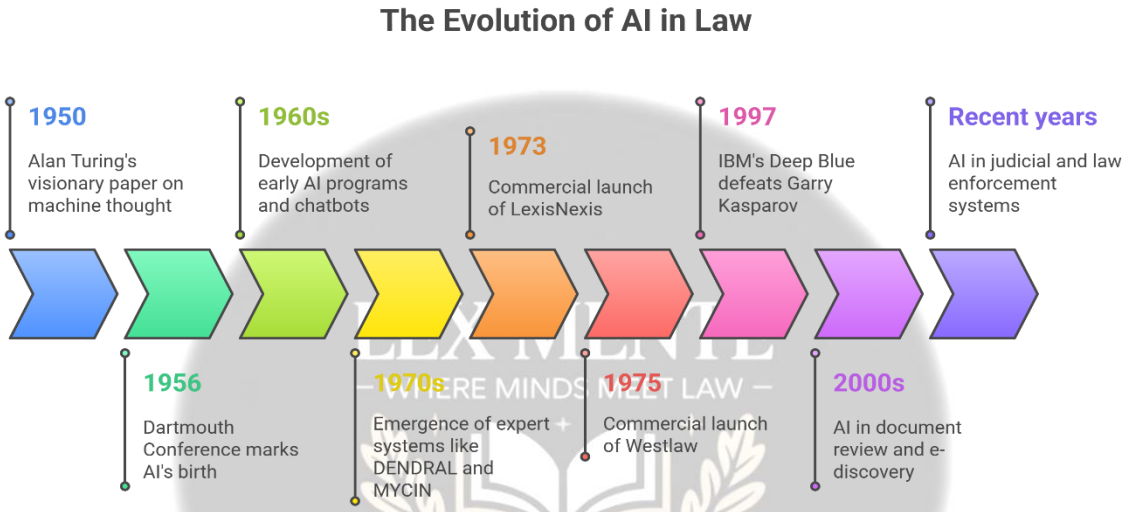
Keywords: Artificial Intelligence/AI, Judicial Integrity, Accountability, Algorithmic Bias, Digital Privacy, Fair Trial, Due Process, Rule of Law.

[5] Regulation (EU) 2016/679, of the European Parliament and of the Council of 27 Apr. 2016 on the Protection of Natural Persons with Regard to the Processing of Personal Data and on the Free Movement of Such Data (General Data Protection Regulation), 2016 O.J. (L 119) 1 (EU).

[6] European Convention on Human Rights art. 6, Nov. 4, 1950, 213 U.N.T.S. 221.

INTRODUCTION

AI is transforming how decisions are made across multiple sectors, including healthcare, finance, governance, and, increasingly, the Judiciary. AI refers broadly to computer systems that can perform tasks that usually require human intelligence, such as learning, reasoning, perception, and decision-making. Over time, AI has evolved from simple rule-based systems in the 1950s and 1960s to complex machine learning (ML) and deep learning models that strengthen today's most advanced applications. Types of AI most relevant here include expert systems, natural language processing (NLP), ML, and predictive analytics, each contributing distinctively to the automation of decision-making.[7]



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In recent years, AI's presence has grown rapidly in core legal functions—streamlining court record management, assisting judges with legal research, predicting reoffending risks at bail hearings, and even analyzing evidence. Tools like risk-assessment algorithms are being used for pretrial release recommendations and predictive monitoring software aims to anticipate crime hotspots.[8] Such technologies promise faster, data-driven solutions, yet they introduce a new and urgent concern: algorithmic bias. Unlike traditional human error, algorithmic bias is systematic and can remain hidden within complex code or discriminatory data, influencing decisions at scale. In legal settings—where the stakes are liberty and justice—this poses profound threats to

[7] Alan M. Turing, Computing Machinery and Intelligence, 59 *Mind* 433 (1950).
[8] Andrew L.T. Chien, Predictive Analytics in Judicial Processes, 25 *Harv. J.L. & Tech.* 289 (2020)., Cynthia Rudin, Algorithms for Criminal Justice Risk Assessment, 34 *Ann. Rev. Stat. & Data Sci.* 297 (2019).

foundational rights like due process and fair trial, possibly reinforcing pre-existing inequalities under the guise of objectivity.[9]

This paper is driven by four key research objectives:

a) To study how AI is being integrated into the justice system, particularly in areas where it supports courts and influences crucial decision-making processes.

b) It also explores how bias may become embedded in these technologies, examining the consequences for fairness, equality, and the right to due process.

c) To review the current safeguards and regulations designed to protect people's rights, considering what is needed to ensure that the growing presence of AI in legal settings upholds justice for all.

d) To consider the adequacy of India's existing legal, policy, and judicial responses to these issues as of 2025.[10]

The scope of this paper centers on AI's influence over judicial and law enforcement decision-making, especially in India, drawing select comparisons with global best practices, examining the divergent regulatory responses of India, the European Union, and the United States in mitigating algorithmic discrimination, procedural opacity, and institutional accountability.[11]

Recent policy and ethical frameworks, including UNESCO's Recommendation on the Ethics of Artificial Intelligence[12] and the OECD's Governing with Artificial Intelligence report, emphasize the necessity of transparency, explainability, and oversight in algorithmic decision-making.[13] Due to inconsistent enforcement marginalized communities continue to bear the brunt of systemic digital discrimination.[14] The preservation of judicial independence, therefore, requires embedding strong procedural safeguards, mandatory disclosure mechanisms, and human oversight within all AI-assisted decision processes.

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[9] Sonia K. Katyal, Algorithmic Decision-Making and Due Process, 115 *Calif. L. Rev.* 1793 (2027).

[10] Ministry of Electronics & Information Technology, India, *Draft Digital India Act, 2023*, https://www.meity.gov.in/.

[11] Nguyen Thi Thu Trang et al., Right to a Fair Trial When Applying Artificial Intelligence in Criminal Justice—Lessons and Experiences for Vietnam, 12 *J.L. & Sustainable Dev.* e601, e608 (2024).

[12] UNESCO, *Recommendation on the Ethics of Artificial Intelligence* (Nov. 23, 2021) https://www.unesco.org/en/articles/recommendation-ethics-artificial-intelligence

[13] OECD, *Governing with Artificial Intelligence: The State of Play and Way Forward in Core Government Functions* 28 (2025), https://doi.org/10.1787/795de142-en .

[14] Chaudhary Hamza Riaz, Legal Technology and Bias: A Threat to Fair Trial Rights? (July 19, 2025), https://ssrn.com/abstract=5357741.

The structure of the study unfolds as follows: the subsequent section examines the development and use of AI in the justice system, followed by an analysis of algorithmic bias and its effects on law, an overview of existing frameworks and guidelines, and ultimately, recommendations and a conclusion.

CONCEPTUAL AND THEORETICAL FRAMEWORK

This section deals with definitions of key terms, the theories identified theoretical base of this research and the relevance of the theories in evaluating AI in law and justice

Artificial Intelligence: There is no single definition of AI that most scholars would agree to. According to the "European Commission", AI refers to "systems that display intelligent behaviour by analysing their environment and taking actions with some degree of autonomy to achieve specific goals."[15]

Algorithmic bias: Is a socio-technical phenomenon.[16] Algorithmic bias refers to systematic and structured errors and bias points in AI systems or AI-based systems that produce biased results and inequalities without any justifiable reason[17]**.** The earliest development happened almost a decade ago in the form of the COMPAS (Correctional Offender Management Profiling for Alternative Sanctions) algorithm, which was created as an AI-based tool designed to "predict" the likelihood of a defendant's recidivism, to guide judicial decisions, and provide data-driven criteria for sentencing[18].

Datafication: refers to the quantification of human life through digital information, very often for economic value[19].

Due process: The notion of due process a basic legal concept that assures impartiality and equity in court proceedings. "No person shall be deprived of his right conferred by Article 21 except according to procedure established by law." It originated in Magna Carta of 1215, which established the idea that everyone is entitled to a fair hearing and a chance to defend themselves against charges. In the US the principle of due process is enshrined in the Fifth and Fourteenth

[15] European Commission, *Artificial Intelligence for Europe*, COM (2018) 237 final (Apr. 25, 2018), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52018DC0237.

[16] M. Favaretto, E. De Clercq & B.S. Elger, Big Data and Discrimination: Perils, Promises and Solutions, 6(1) J. Big Data 12 (2019) https://doi.org/10.1186/s40537-019-0177-4.

[17] Robert et al. 2020; Kordzadeh and Ghasemaghaei 2022; Fazelpour and Danks 2021; Johnson 2020; Hooker 2021; Robert et al. 2020

[18] Brennan, W. Dieterich & B. Ehret, Evaluating the Predictive Validity of the COMPAS Risk and Needs Assessment System, 36 *Crim. Just. & Behavior* 21 (2009) https://doi.org/10.1177/0093854808326545.

[19] U.A. Mejias & N. Couldry, Datafication, 8(4) *Internet Policy Rev.* (2019) https://doi.org/10.14763/2019.4.1428/

Amendments of the constitution. These amendments guarantee that no person can be deprived of life, liberty, or property without due legal process.[20]

Fair trial: "Everyone is entitled in full equality to a fair and public hearing by an independent and impartial tribunal, in the determination of his rights and obligations and of any criminal charge against him."[21]

Large Language Models (LLMs): are a category of deep learning models trained on immense amounts of data, making them capable of understanding and generating natural language and other types of content to perform a wide range of tasks.[22]

Taxonomy of e-judges: There are 3 types of e-judges based on their involvement in judicial proceedings and the degree of human involvement.

(a) "Argument development AI": The first conceptual model is "Argument Development AI", an e-judge is designed to support judicial reasoning by analysing vast repositories of legal texts, precedents, and case law. The judge's role as the ultimate arbiter of justice must remain intact.

(b) "Supervised e-Judge": "a human judge-in-the-loop" This model takes a more active role in the judicial process by assisting in the drafting of judgments.

(c) "Autonomous e-Judge": The most ambitious model is the Autonomous e-Judge, an AI system capable of independently deciding certain types of cases. This model could be particularly suited to routine or low-stakes matters, such as traffic violations or small claims disputes.[23]

Black Box: The "**black box problem**" in AI refers to the lack of transparency in how complex algorithms reach their decisions, making it difficult to understand or challenge outcomes.[24] In judicial settings, this undermines fair trial rights by preventing parties from scrutinizing,

[20] John V. Orth, Due Process of Law, *EBSCO Research Starters* (2025), https://www.ebsco.com/research-starters/law/due-process-law.

[21] Universal Declaration of Human Rights art. 10, G.A. Res. 217A (III), U.N. Doc. A/810 (Dec. 10, 1948).

[22] Tom B. Brown et al., Language Models Are Few-Shot Learners, 33 *Adv. Neural Inf. Process. Syst.* 1877, 1877–1901 (2020)., Emily M. Bender et al., On the Dangers of Stochastic Parrots: Can Language Models Be Too Big? *Findings Ass'n Comput. Linguistics* 610, 610–23 (2021).

[23] Vytautas Mizaras, Opening of the Judicial Year 2025 Judicial Seminar – Artificial Intelligence and the Right to a Fair Trial (Jan. 31, 2025 https://www.echr.coe.int/documents/d/echr/speech-20250131-mizaras-jy-eng.

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

contesting, or appealing AI-driven decisions, thus threatening procedural fairness and accountability.[25]

Rule of Law: the absolute supremacy or predominance of regular law as opposed to the influence of arbitrary power and excludes the existence of arbitrariness or even of wide discretionary authority on the part of the government. It has 3 elements

i) Supremacy of Law

ii) Equality Before Law

iii) Predominance of Legal Spirit[26]

METHODOLOGY

This research mostly relies on doctrinal approach, complemented by comparative elements, to examine the safeguarding of fair trial rights against algorithmic bias in the digital era. The doctrinal method allows for in-depth analysis of legal principles, statutory frameworks, and judicial interpretations pertaining to due process and AI, as reflected in foundational documents such as the EU AI Act, GDPR, Digital Personal Data Protection Act (DPDPA) (2023), ECHR[27], and various national AI strategies and advisories[28]. Comparative analysis is incorporated through a review of policies and court practices across jurisdictions, drawing from case studies and reports focused on Singapore, South Korea, Australia, and the EU, such as "Navigating AI in the Courts: Lessons from Singapore, South Korea, and Australia" and "Governing with Artificial Intelligence."[29]

Secondary sources include statutes, landmark judicial decisions, scholarly articles, government advisories, international policy papers, and studies concerning AI implementation in courts[30]. Thematic analysis is employed to identify key concepts, emerging patterns, and recurring themes related to algorithmic bias and procedural safeguards.

[25] Christopher Slobogin, The Right to Transparency in Algorithmic Sentencing, 102 *Cornell L. Rev.* 967, 975–78 (2017).
[26] A.V. Dicey, *Introduction to the Study of the Law of the Constitution* 188 (10th ed. 1959).
[27] Regulation (EU) 2024/1689, arts. 5, 9–13, 51, 53, 62, 72–74, Annexes IV, XII–XIII, 2024 O.J. (L 1689) (EU) https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202401689.
[28] NITI Aayog, *National Strategy for Artificial Intelligence* 74–82 (2018) (India).
[29] OECD, *supra note* 13.
[30] Ministry of Electronics & IT, Govt. of India, *Responsible AI for All: Principles for Responsible Management of AI Systems* 32–48 (2021).

This mixed qualitative approach is justified as it enables logical study of both theoretical and practical responses to algorithmic bias, synthesizes diverse national/international frameworks, and evaluates the effectiveness of current legal and policy mechanisms in protecting due process and fair trial rights in increasingly digital judicial contexts.[31]

LEGAL AND REGULATORY FRAMEWORK

Advances in artificial intelligence (AI) and algorithmic decision-making pose profound challenges to safeguarding due process rights, particularly the right to a fair trial and procedural fairness.

Constitutional Protections of Due Process in India:

(a) Constitution of India – Article 21 (Right to personal liberty and Procedural fairness): It guarantees that no person shall be deprived of their life or personal liberty except according to "procedure established by law." Judicial interpretation has expanded this "procedure" to require fairness, justness, and reasonableness, thereby adopting substantive due process protections that include transparency, right to be heard, and non-arbitrariness in governmental actions[32]. The precept of procedural fairness incorporated in Article 21 extends to any state action adversely affecting individuals' rights, including decisions made or influenced by automated or AI-based systems.[33]

(b) DPDPA, 2023: India's legislative developments, establish obligations for data fiduciaries to ensure lawful, fair, and transparent processing of personal data, placing emphasis on consent, accuracy, and redressal mechanisms. These provisions are crucial in limiting discriminatory or biased algorithmic processes affecting individuals' legal rights.[34]

Relevant International Provisions:

(a) ECHR – Article 6 enshrines the right to a fair trial, mandating impartiality, public hearings. The principle of transparency and the right to understand and challenge automated decisions have been emphasized in interpretations relating to AI use.[35]

[31] Future of Life Institute, *High-Level Summary of the EU Artificial Intelligence Act* (May 30, 2024).
[32] *India Const*. art. 21.
[33] *Maneka Gandhi v. Union of India*, (1978) 1 SCC 248 (India).
[34] *Digital Personal Data Protection Act*, No. 22 of 2023, India Code.
[35] Convention for the Protection of Human Rights and Fundamental Freedoms arts. 6, Nov. 4, 1950, 213 U.N.T.S. 222 [European Convention on Human Rights].

(b) GDPR: The EU's (GDPR) require transparency, explainability, and accountability in automated decision-making processes, especially where such decisions have legal or similarly significant effects.[36]

(c) EU Artificial Intelligence Act: In June 2024, the EU adopted the world's first rules on AI. The AI Act applies primarily to providers and deployers putting AI systems and Global Partnership and Artificial Intelligence (GPAI) models into service or placing them on the EU market and who are based in the EU, and to providers of AI systems that are established in a third country, when the output produced by their systems is used in the EU.[37]

Judicial Precedents Safeguarding Fairness and Transparency:

Indian judiciary has progressively enforced due process guarantees in the context of technological advancement. Landmark Supreme Court rulings in 1996[38] and 2011[39] underscore the necessity of fair procedures, access to justice, and the right to be heard. The courts affirm that all state actions, including those leveraging technologies like AI, must withstand scrutiny for arbitrariness and ensure equality before law. Internationally, courts have stressed the importance of "explainability" of algorithmic decisions, mandating that affected individuals receive meaningful information about the logic and significance of such decisions to exercise their right to contest them. Judicial guidelines and legal policy frameworks often mandate human oversight over AI decisions, preventing over-reliance and addressing risks of systemic bias.[40][41]

Emerging Legal Instruments and Proposals

India's evolving legal landscape, exemplified by the DPDPA, 2023[42], along with sectoral judicial pronouncements, establishes a foundation to regulate AI's intersection with due process rights. At the international level, regulations such as the EU AI Act and frameworks by the OECD[43] propose harmonized standards for trustworthy AI, urging nations to embed fairness, transparency, and human rights into AI governance. Such frameworks are complemented by

[36] Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act), COM/2021/206 final.
[37] Regulation (EU) 2024/1689, of the European Parliament and of the Council of 13 June 2024 on laying down harmonized rules on artificial intelligence (AI Act), 2024 O.J. (L 1689) 1 (EU), https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202401689.
[38] *State of Punjab v. Gurmit Singh*, (1996) 2 SCC 384 (India).
[39] *Mohd. Sukur Ali v. State of Assam*, (2011) 4 SCC 729 (India).
[40] *Sant'Anna v. Italy*, App. No. 12045/86, 1996-V Eur. Ct. H.R. 1660.
[41] *Loomis v. Wisconsin*, 881 N.W.2d 749 (Wis. 2016) (U.S.).
[42] *Digital Personal Data Protection Act*, supra note 34, §§ 3, 4, 24., Ministry of Electronics & Information Technology, Govt. of India, *Digital Personal Data Protection Act, 202*3, https://www.meity.gov.in/
[43] OECD, *supra note* 13.

judicial guidelines[44], institutional oversight mechanisms, and technological standards for explainability and bias mitigation, representing an integrated approach to preserving the integrity of legal processes in the digital era.

FINDINGS & ANALYSIS

(a) Use of AI and related tools has increased manifold over the past decade. Several legal tasks, including legal research, contract review, and prediction of case outcomes use AI technologies, such as ML algorithms, NLP, and computer vision. AI on the one hand optimizes the cost-efficiency trade off while of the other hand it raises concerns about privacy, bias, and accountability. The fear lurching in everyone's mind is that the rapidly growing AI intervention might replace human judges, and it might adversely affect the right to a fair trial and other fundamental rule of law values.

(b) In 2016 Dutch computer scientist J. van den Herik claimed that by 2030 or 2040, AI systems could deliver most judicial decisions autonomously.[45] Reed C. Lawlor, an American attorney had observed in 1963 that the computer "is not a substitute for lawyers and judges. It is a tool that will lighten their burdens and aid them in achieving clear thinking more readily and with less fatigue."[46]

(c) It makes sense to use algorithms in criminal proceedings for evidentiary purposes and for supporting decision-making despite the fact that these tools are still concealed in secrecy and opacity and that we do not understand how they generate their specific output[47].

(d) Litigation is adversarial, AI in the administration of justice causes a knowledge asymmetry between parties. Therefore, it is essential to ensure that the guarantees of the right of access to the judge and the right to a fair trial is not adversely impacted[48].

(e) Courts must uphold and serve the rule of law, which is one of the pillars of democracy. The right to a fair trial is at the core of human rights protection. If we were to design a system where an AI-powered judge replaces human judges, the AI judge would need to fully assume all the

[44] Supreme Court of India, *Guidelines for Use of Advanced Technologies in Judicial Processes* (2024).
[45] Jaap van den Herik, In 2030 Zullen Computers Rechtspreken, *Mr Online* (Oct. 31, 2016) https://www.mr-online.nl/in-2030-zullen-computers-rechtspreken/.
[46] Reed C. Lawlor, What Computers Can Do: Analysis and Prediction of Judicial Decisions, 49(4) *ABA J.* 337 (1963).
[47] Francesca Palmiotto, The Black Box on Trial: The Impact of Algorithmic Opacity on Fair Trial Rights in Criminal Proceedings, in *Algorithmic Governance and Governance of Algorithms: Legal and Ethical Challenges* 61 (Martin Ebers & Marta Cantero Gamito eds., Springer 2021).
[48] CEPEJ, *European Ethical Charter on the Use of Artificial Intelligence in Judicial Systems and Their Environment* (2018).

tasks of a human judge during legal proceedings, including those requiring the elusive "human touch". Judges are information processors and problem solvers—these roles can be replaced by AI. But judges need empathy, moral reasoning, which cannot be matched by AI models. In criminal cases, AI can be tasked with proposing sentences. However, the role of human judges is more extensive. Judges make reasoned choices between sentencing and other options like community service, therapy, or restorative measures based on evidence examined. Judges do not use the one size fits all approach. Judges use empathy which AI lacks.[4950] According to ECHR the right to adversarial proceedings and the principle of equality of arms are to aspects of the right to free trial. Equality of arms requires that all parties should be afforded fair and equal opportunities - to call witnesses and cross-examine the witnesses called by the other party. (51 ibid)

(e) The Reasons for Judicial Decisions

Judges are required to provide reasoned decisions. This evidences that the case has been heard. Providing reasoned decisions is procedural as well as vital to making both parties and society at large to respect judicial decisions. The reasons provided should help the parties to use the appeal window if required.

The black-box syndrome plagued the ML and first-generation generative AI systems. They could not offer reasons for their conclusions.[51] However modern models like OpenAI's o-series (GPT-o1, o3, o4-mini)[52], Google's Gemini 2.5 Pro, DeepSeek-R1[53] and extended-thinking modes like Claude—have overcome the deficiency to a large extent.

The main issue here is not whether AI can generate reasoned text but whether the AI-generated reasoning fulfils the criteria defined in Article 6 of ECHR[54]

(f) A Public Hearing

[49] Richard A. Kulka & Joan B. K

[50] Dennis J. Devine & David E. Caughlin, Do They Matter? A Meta-Analytic Investigation of Individual Characteristics and Guilt Judgments, 20(2) *Psychol. Pub. Pol'y & L.* 109 (2014).

[51] Cynthia Rudin, Stop Explaining Black Box Machine Learning Models for High-Stakes Decisions and Use Interpretable Models Instead, 1 *Nat. Mach. Intell.* 206–15 (2019).

[52] OpenAI, Learning to Reason with LLMs (Sept. 12, 2024),https://openai.com/index/learning-to-reason-with-llms/. (accessed May 7, 2025).

[53] Daya Guo et al., Deepseek-R1: Incentivizing Reasoning Capability in LLMs via Reinforcement Learning, *arXiv* (Jan. 29, 2025), https://arxiv.org/abs/2501.12948 (accessed May 7, 2025).

[54] Tamera Lanham et al., Measuring Faithfulness in Chain-of-Thought Reasoning, *arXiv* (July 17, 2023) https://arxiv.org/abs/2307.13702 (accessed May 7, 2025); Miles Turpin et al., Language Models Don't Always Say What They Think: Unfaithful Explanations in Chain-of-Thought Prompting, 36 *Adv. Neural Inf. Process. Syst.* 74952 (2023).

The public hearing requirement of a fair trial, prevents justice from being administered in secrecy. This ensures transparency and accountability. Litigants are protected because the proceedings are open to scrutiny. This enhances confidence in courts, it protects litigants, trust in the judiciary and the legal system.

The right to public hearing also includes a right to oral hearing at the court of first instance. Exceptions permitted only when they are justified and do not affect the fairness of the proceedings.[55]

ECHR Article 6(1) provides an extended definition of pronouncing judgement publicly. But allowing AI equipped judge to deliver judgement in secrecy especially when proprietary algorithms are used. These affect transparency and accountability.

RECOMMENDATION

(a) AI use in the legal industry has increased rapidly over the past decade. While the use of AI in law has the potential to increase efficiency and reduce costs, it also raises concerns about privacy, bias, and accountability.

(b) Aligning AI in the judiciary requires meeting the standards with the individual rights codified in the ECHR. This includes upholding the guarantees of a fair trial—particularly the right to a legally established judge, the right to an independent and impartial tribunal, and the principle of equality of arms in judicial proceedings.

(c) As the European Commission for the Efficiency of Justice (CEPEJ) observes, when AI tools are employed to resolve disputes or assist judicial decision-making, they must not compromise the essential guarantees of access to a—presumably human—judge.[56]

(d) Equality of arms can be maintained only if judges grant open access to the affected parties to the AI algorithm relied upon in the decision making. The access should enable the party to challenge the algorithm's scientific validity, scrutinise the weight assigned to various elements, and identify any potential errors in its conclusions.

(e) Legitimacy is central to the judiciary, and public trust depends on judgments being delivered—and owned—by human judges. Although LLMs can draft persuasive legal text, people may not accept rulings resting solely on algorithms. Thus, any AI-assisted decision

[55] See, e.g., *Allan Jacobsson v. Sweden (No. 2)*, App. No. 16970/90, ¶ 46 (Eur. Ct. H.R. 1998); *Fredin v. Sweden (No. 2)*, App. No. 18928/91, ¶¶ 21–22 (Eur. Ct. H.R. 1998); *Mirovni Inštitut v. Slovenia*, App. No. 32303/13, ¶¶ 36–37 (Eur. Ct. H.R. 2018); *Göç v. Turkey*, App. No. 36590/97, ¶ 47 (Eur. Ct. H.R. 2002).

[56] CEPEJ, *European Ethical Charter on the Use of Artificial Intelligence in Judicial Systems and Their Environment* 8 (2018).

must include a transparent, reasoned justification authored and endorsed by the judge personally.

CONCLUSION

Research consistently shows that justice systems often fail to deliver impartial outcomes. Studies reveal troubling links between judicial decisions and factors that should be irrelevant to case judgments, while the right to a fair trial is one of the most violated human rights internationally. Artificial intelligence and machine learning could help improve efficiency and fairness in legal processes by reducing delays and inconsistencies. However, using AI without critical oversight, especially when it learns from flawed past practices, may reinforce existing biases and perpetuate injustices. Careful implementation and monitoring are crucial to harness technology's benefits while minimizing risks to due process.[57] Artificial intelligence cannot constitute an independent and impartial tribunal (court) because of the following reasons:

a) Courts administer justice on behalf of the community or on behalf of the state. Administration of justice is one of the sovereign functions of the state.[58] Therefore it is unacceptable that the role of judges is usurped by programs, algorithms and AI systems. A judge should not only be able to apply the law but also be a member of a community. The belonging to community enables the judge to understand the finer nuances of the community and confers social legitimacy to their decisions.[59]

b) The social legitimacy of courts and judges is closely linked to the trust and confidence society places in the courts to ensure legitimacy of judgments. The solutions proposed for the use of AI mechanisms in the administration of justice are not sufficient to create an environment of informed trust[60]. They don't permit justice to be entrusted to computer programs or artificial intelligence.

[57]Helga Molbæk-Steensig & Alexandre Quemy, Artificial Intelligence and Fair Trial Rights, https://cadmus.eui.eu/bitstreams/b584d555-32c5-57aa-a2ea-b4957d88a6d6/download.
[58] *Vilho Eskelinen & Others v. Finland*, App. No. 63235/00, ¶ 47 (Eur. Ct. H.R. Apr. 19, 2007).
[59] Ian Kerr & Carissima Mathen, Chief Justice John Roberts Is a Robot (2019) (unpublished manuscript) (on file with Univ. of Ottawa); Tania Sourdin, *Judges, Technology and Artificial Intelligence: The Artificial Judge* 211–12 (Edward Elgar Publ'g 2021).
[60] Giuseppe Contissa & Giulia Lasagni, When It Is (Also) Algorithms and AI That Decide on Criminal Matters: In Search of an Effective Remedy, 28 *Eur. J. Crime Crim. L. & Crim. Just.* 300 (2020).

Judges should not only be technically competent in order to perform the judicial functions assigned to them by the state but also possess moral integrity to perform the role in courts operating in states governed by rule of law.[61]

c) AI may help in reducing the emotional entanglement of the judge or other subjective factors of human beings in the decisions rendered by them.[62] However, justice cannot be rendered devoid of emotions or other subjective characteristics, within the four corners of laws, codes and analysis of judicial precedents. The judges make decisions based on their conscience.[63] At times Judges use intuition and absence of intuition makes the judgement unfair.[64] Judges reveal compassion, mercy and are just. However, these qualities cannot be found in AI. But AI indicates efficiency, reliability, speed and intelligence.

d) The administration of justice and the protection of the individual's right to a fair trial require that the court be composed of judges who are capable not only of processing information and drawing conclusions from it, but, above all, of taking decisions that affect the rights, freedoms, or duties of individuals in accordance with their conscience, intuition & mercy. Even the most advanced artificial intelligence will not possess these qualities, which are the essence of the discretionary and judicial power of the court and the judge.

Petition Filed in Supreme Court on 10th November, 2025 claims that GenAI in judiciary may lead to fake case laws. The petition cautioned that unregulated use of AI and machine learning in the judicial system could raise serious constitutional and human rights issues. It argued that relying on generative AI for judicial work risks errors like fabricated judgments and the perpetuation of bias, emphasizing that court decisions must be transparent and explainable, not left to algorithmic unpredictability. It was also noted that while AI can aid

[61] *Guðmundur Andri Ástráðsson v. Iceland*, App. No. 26374/18, ¶¶ 220–21 (Eur. Ct. H.R. Dec. 1, 2020); *Xero Flor w Polsce sp. z o.o. v. Poland*, App. No. 4907/18, ¶ 244 (Eur. Ct. H.R. May 7, 2021); *Reczkowicz v. Poland*, App. No. 43447/19, ¶ 217 (Eur. Ct. H.R. July 22, 2021).

[62] Thomas Julius Buocz, Artificial Intelligence in Court: Legitimacy Problems of AI Assistance in the Judiciary, 2 *Retskraft* 44 (2018); Chronowski, Kalman & Szentgali-Toth, (n. 27), at 176.

[63] Christoph Grabenwarter, *European Convention on Human Rights: Commentary* 118 (CH Beck, Hart, Nomos 2014); Jakub Kisiel, The Constitutionality of Algorithmic Sentencing in Criminal Law in Poland, 3 *J. Crim. L. & Penal Sci.* 68 (2021).

[64] Tania Sourdin, supra note 11, at 1123; Marcin Górski, Why a Human Court? On the Right to a Human Judge in the Context of the Fair Trial Principle, 1 *Eucrim* 87 (2023).

administrative tasks, it cannot substitute the essential human judgment required in judicial decisions. The Petition would be heard after 2 weeks from date of filing.[65]

[65] Krishnadas Rajagopal, Petition in Supreme Court Says GenAI in Judiciary May Lead to Fake Case Laws, *The Hindu* (Nov. 2025) https://www.thehindu.com/news/national/petition-in-supreme-court-says-genai-in-judiciary-may-cause-hallucinations-lead-to-fake-case-laws/article70262821.ece