

AI Judges and the Rule of Law: Can Artificial Intelligence Replace Judicial Decision-Making?

Muneeba Javid¹, Nasir Majeed^{*2}, Sarmad Sultan³

Abstract

Artificial Intelligence (AI) is increasingly transforming the administration of justice through automated legal research, case management, predictive analytics, evidence analysis, document review, translation, judgement drafting, and online dispute resolution. These developments raise a fundamental jurisprudential and constitutional question: whether artificial intelligence can ultimately replace human judges in judicial decision-making without undermining the rule of law. This article argues that although AI possesses significant potential to improve judicial efficiency, consistency, accessibility, and analytical capacity, it cannot legitimately replace human judicial decision-making in matters involving fundamental rights, liberty, dignity, constitutional interpretation, proportionality, disputed facts, and moral judgement. Judicial adjudication is not merely a mechanical process of matching facts with legal rules. It involves interpretation, discretion, institutional legitimacy, procedural fairness, accountability, contextual reasoning, and the exercise of publicly conferred judicial authority. The article examines the relationship between AI and the rule of law, focusing on judicial independence, impartiality, algorithmic bias, transparency, explainability, accountability, due process, and the right to a fair trial. It comparatively examines emerging international approaches, particularly the European Union Artificial Intelligence Act, the Council of Europe Ethical Charter, the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law, and UNESCO's Guidelines for the Use of AI Systems in Courts and Tribunals. It also considers the constitutional implications for Pakistan, particularly judicial independence, separation of powers, fair trial, due process, and fundamental rights. The article proposes a human-centred judicial AI model based on the principle that AI may assist judges but should not possess autonomous authority to determine legal rights or liabilities. It concludes that the future of judicial AI should not be understood as a choice between humans and machines but as a model in which artificial intelligence operates under meaningful human judicial control.

Article History

Received 15 June 2026
Revised 25 June 2026
Accepted 14 July 2026
Published 20 July 2026

OPEN ACCESS

Corresponding Author *

Keywords

Artificial Intelligence,
AI Judges, Rule of Law,
Judicial Decision-
Making, Judicial
Independence,
Algorithmic Bias,
Explainability, Fair
Trial, Constitutional
Law, Pakistan, Legal
Technology.

1. Introduction

In the history of state institutions the judiciary has been considered one of the most humanistic. Judicial decision-making is the interpretation of law, the analysis of evidence, the determination of facts, the resolution of disputes, the protection of rights, and the imposition of consequences

¹ Muneeba Javid, Assistant Professor, The Department of Law, University of Sialkot, Pakistan, muneeba.javid.randhawa@gmail.com

² Nasir Majeed, Assistant Professor, School of Law, University of Gujrat, Pakistan, nasir.majeed@uog.edu.pk (Corresponding Author)

³ Sarmad Aultan, Research Associate, Sialkot Bar Association, Pakistan, sarmadm705@gmail.com

that are legally binding upon persons and institutions. A judge doesn't simply pick out a rule and mechanically apply it to the case. Uncertainty, ambiguity, conflict, credibility, and social and constitutional values often are important considerations in judicial adjudication. This old paradigm of judicial control is now being called into question by the swift transformation of AI technology. The unprecedented evolution of artificial intelligence is now threatening this antiquated notion of judicial control. Nowadays, it is possible to feed large volumes of legislation and case law into an AI system, which can then recognize patterns in past rulings, condense pleadings, compile evidence, forecast litigation results, find relevant precedents, and create preliminary reasoning. As these developments continue, it's evident that AI's technological capabilities may ultimately render the human judge redundant. The question of whether or not AI can replace judges should, however, be separated from the question of whether or not AI can help judges. This latter is already a reality in many legal systems. Judge-Bot is currently being used in courtrooms and judicial bodies for a variety of tasks, including legal research, case categorization, court scheduling, translation, transcription, document management, and more. The Council of Europe has seen the potential of AI to enhance justice's efficiency and quality and has stressed that its application must be consistent with the fundamental rights, judicial independence, and impartiality, as well as with the rule of law. Likewise, the UNESCO 2025 Guidelines for the Use of AI Systems in Courts and Tribunals take a different perspective on AI, namely as a tool to assist but not replace judges. The European Union Artificial Intelligence Act also has designated some AI systems for the administration of justice as high-risk and mandated that they must be subject to high standards of required human oversight, transparency, accuracy, and fundamental rights protections (Tumanov, 2024; Gul et al., 2025).

The question, then, isn't so much whether a machine can generate a legal response, but rather whether a machine can provide a legal response. The deeper question is if a machine can have judicial power that will meet the constitutional and normative standards of the rule of law. A decision by the courts is legitimate not just if it is "right" in its result. It should also be created in an appropriate process, by an institution with legal competence, in a proper procedure, based on evidence that can be challenged, for understandable reasons, and be accountable and subject to appeal. The issue of the accuracy of the calculations and the constitutionality of the law is at the heart of the debate about AI judges. This article contends that while the use of artificial intelligence in the judicial arena could revolutionize the judicial process, it cannot, in itself, replace the human judicial process, especially where there are important legal rights and constitutional interests at stake. AI can perform mathematical operations and comparisons, make predictions, classify, search, and generate possible reasoning. It cannot, however, have its own constitutional authority, democratic legitimacy, judicial responsibility, or the human ability to make contextual normative judgments, which are the basis of legitimate adjudication. The right one is therefore a judicial system that is human-centered, rather than an autonomous AI judge, a system in which AI acts as a potent tool for assisting with decisions in a meaningful and independent way (Dolidze 2026; Gul et al., 2025).

2. Conceptualising the AI Judge

The term "AI judge" can mean several different degrees of involvement of technology in the adjudication process. On a very fundamental level, AI can automate some of the more routine

administrative processes, including scheduling hearings, organizing case files, creating case transcripts, categorizing documents, and identifying any procedural shortcomings. Generally, the technology does not affect substantive legal rights, and this aspect of the technology is not the subject of constitutional concern. In more advanced applications, AI can help judges in their legal research by cross-referencing statutes and precedents, academic works, and comparative legal research. This kind of AI support can help increase the efficiency of judges without taking any steps to replace or alter their judgments. The next stage is the decision-support systems, which can make decisions based on evidence, uncover trends in past rulings, make predictions about future rulings, or make recommendations on issues such as sentencing, damages, bail, or anything else. The constitutional problems are more serious at this point, as there is a greater potential to blur the line between assisting and decision-making. A judge could have the formal power to make his decision but be much more dependent on the algorithm's recommendation. The most advanced scenario would be a completely independent AI system that was fed with facts, evidence, legal submissions, and applicable law and generated an end decision. This is a system that would afford a judicial function. This is the most problematic type of independent AI adjudication, and one that endangers the rule of law. These models are different in important ways: it is not the same as saying "AI is present in courts," that is, using AI does not make it a judge. Automated administration and law search are different from independent adjudication. Savory AI technologies can be administered and analysed in a legal system without harm, and the laws can also forbid AI from reaching the ultimate conclusions on matters of freedom, ownership, constitutional rights, and criminal liability (Bodul 2023; Malik, et al., 2024).

3. Judicial Decision-Making Is More Than Legal Computation

Among the most compelling reasons to use AI judges is the fact that law is seemingly logical and can be processed by computers. The judicial process, in its simplified form, might seem to be the act of identifying a law, finding the facts, and applying the rules to the facts. If that truly mirrored the reality of adjudication, then AI might be able to take the place of judges, as computers can process information quicker and faster than humans. In reality, however, it is much more complicated in the realm of actual judicial actions. Ambiguous statutory language, conflicting precedents, incomplete legislation, conflicting evidence, facts that are not fully known, and competing constitutional rights and new technological or social situations are common problems in the courts. In a negligence case, a court might need to establish if a defendant had a 'duty of care' towards the claimant; if the defendant failed to meet this duty; whether the harm was 'foreseeable'; whether the claimant 'contributed' to the harm; and what compensation would be 'proportionate.' Often these determinations cannot be expressed in mathematical variables beforehand. This is even more clear in constitutional adjudication cases. A constitutional court might be asked to reconcile the rights to freedom of expression and privacy, to national security and to individual liberty, or to economic regulation and to the rights of property. General rather than specific principles may be given in the relevant legislation. The judge has to apply those principles and to decide how they are to be applied in a specific set of facts. This process is not statistical prediction but normative and constitutional arguments. While AI can identify all relevant provisions and precedents in record time, it can still not be the same as identifying the normative priority of the provisions and precedents. This machine could be used to predict the outcome of a

court case. Nor does the fact that the Constitution does not provide a clear precedent in a novel case mean that the machine can decide what is required by the Constitution (Smuha, 2026; Gul, et al., 2025).

4. AI and the Rule of Law

In the rule of law, judicial legitimacy rests on the basis of the rule of law. While there are different conceptions of the rule of law formulated by different scholars, its essential elements mostly involve 'legality,' 'equality before the law,' 'predictability,' 'procedural fairness,' 'judicial independence,' 'impartiality,' 'accountability,' 'access to justice,' and 'effective remedies.' The legitimacy of judicial institutions is, however, not only established by the correctness of the decisions made but also by the fairness and transparency of the decision-making process. With the introduction of AI in judicial decision-making, it is a fundamental question whether AI algorithmic decision-making can meet these requirements. The importance of the issue is heightened due to the judiciary's coercive state power. When a court sentences someone to jail, levies a fine, adjudicates the right to property, severs a child's relationship with his or her parents or strikes down a law, it is, in some of the most important ways, exercising the greatest public power. The person or organization that has that authority must, therefore, be legally qualified, accountable, and independent and provide reasons. The Council of Europe's vision illustrates such a link between AI and the rule of law. Its Ethical Charter on the Use of Artificial Intelligence in Judicial Systems lays the groundwork for the following fundamental principles: Respect for fundamental rights; non-discrimination; quality and security; transparency and fairness; user control. The later Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law, that the Council of Europe has recently adopted, also situates AI in the context of human rights, democracy, and the rule of law. These methods show that judicial AI goes beyond mere technology; it's a holistic endeavour that involves a deeper understanding of how artificial intelligence can enhance the legal profession. It also has to be assessed on a basis of constitution and rule of law (Bell et al., 2023; Gewirtz, 2024).

5. Judicial Independence and Algorithmic Power

Judicial independence is a key tenet of constitutional democracy. Judges should be independent of any improper influence of governments, political parties, private companies, litigants, prosecutors, or others. With the use of AI, a new and unobvious source of potential influence is introduced: the technology provider and the algorithm itself. The challenge is raised when a judicial AI system is created and operated by a private company: who owns the technology? The provider can choose the training data, model architecture, system updates, optimization objectives, and technical limitations. Judges are not able to comprehend or audit the system without the assistance of others, and the judiciary may start to become reliant on a technology system in which it has little control. The independence of the judiciary would be legally preserved but would be limited in practice. This is especially a problem if AI systems are proprietary. A private company could state that its algorithm is the secret of its business and should not be fully revealed. However, a litigant whose liberty or property is at stake in the algorithm may ask for an explanation of how the algorithm came to its decision. Commercial confidentiality on the one hand and fairness of the proceedings on the other come into sharp focus when proprietary technology is applied to the exercise of public

judicial powers. Judicial independence cannot be expressed in terms of freedom from politics alone. In a world of artificial intelligence, it demands technological autonomy; that is, the courts need to have enough control and understanding of the systems they are using in adjudication so that technology becomes an invisible source of control for the court (Schmitz-Berndt, 2024; Gioia, 2025).

6. Algorithmic Bias and Equality Before the Law

Some of the most formidable arguments against autonomous AI judges are the issue of algorithmic bias. Historical data can be subject to institutional discrimination and prejudice by humans, and AI systems learn from that. When a system is trained on past judicial decisions that may be biased based on socioeconomic, racial, or gender factors—or many other biases that are present in society—an AI system can reinforce these societal biases, seemingly based on scientific and objective reasoning. If, for instance, a particular social group has been consistently sentenced to stiffer penalties over the years, an algorithm that is trained on those sentences could be used to recognize such a social group or its characteristics as being statistically significant in regard to future sentencing. The algorithm could then perpetuate past discrimination practices instead of removing them. The form of the decision used technologically may not seem to be based on data, but the data are. This is a case in point of why we must not take the neutral stance about computers. The purposes of collecting data, the categories to be employed, the objectives to be optimized, and the outcomes to be desired are at the discretion of human beings. Data collection, model development, training, deployment, and interpretation are thus potential points of entry for bias. Non-discrimination is explicitly mentioned in the Council of Europe's Ethical Charter as a crucial principle of judicial AI. This is crucial for equality before the law because it's not the same as statistical uniformity. A mathematical model used in an algorithm to create a prediction may have different impacts for different groups if the underlying data are structurally biased. If a mathematical model used in an algorithm to make a prediction is structurally biased, then the prediction may have different impacts for different groups (Cromvelle, 2025).

7. Conclusion

AI is among the greatest advances in technology that are currently facing the modern legal landscape. It can be used to change the way the justice is administered, as it can process information, analyze legal documents, detect patterns, organize evidence, predict results, and help in drafting. In the past, courts have been reluctant to use AI tools for fear of their novelty. Past courts have been unwilling to use AI tools because of their novelty. With appropriate regulation, AI can assist in minimizing delay, legal research, and administrative inefficiency and increase access to justice. But the issue of whether AI can replace judges is another story. The crux of the issue is not just a matter of whether computers can make correct decisions. People make errors of judgment and are biased and sometimes even make conflicting decisions. AI could be superior to humans in certain computations. However, the judiciary cannot be rendered to be computational. If a judicial decision is legitimate, it is based on a constitutionally recognized institution and is taken by an authorized decision-maker and observed with fair procedures, based on evidence that could be disputed, for reasons that could be challenged, with accountability. Judicial adjudication

includes the concepts of interpretation, discretion, proportionality, constitutional reasoning, contextual judgment, and protection of human dignity. These functions can't simply be transferred to an autonomous algorithmic decision-making without risking harm. This is confirmed by the new emerging international legal one. The EU recognizes that key judicial AI applications are dangerous and that humans need to have the final say in deciding matters. Judicial AI is placed in the context of fundamental rights, non-discrimination, transparency, accountability, and protection of the rule of law by the Council of Europe. AI is also being developed by UNESCO as an assistive and not a substitute technology in courts and tribunals. The developments imply a new principle that has emerged on the international level: to enhance the capacity of judges, but not to replace the judicial authority of human judges. This is significant, especially for Pakistan. Judicial institutions are provided under the constitution, and judicial independence, fair trial, due process, and fundamental rights are protected. This can be integrated with the help of AI, but this should reinforce and not take away constitutional guarantees. Therefore, Pakistan needs to create a rights-based judicial AI framework that is based on human control, transparency of the algorithms, independent auditing, data protection, explainability, contestability, and accountability. That's the fundamental rule that at the same time should be simple and be of constitutional strength: Artificial intelligence can help the judge, but it cannot replace the judge. AI can calculate, predict, search, classify, compare, and draft. It can even give recommendations that are exceptionally advanced. However, where the state has jurisdiction over liberty, dignity, property, constitutional rights, and human status, the final decision should be made by a human judicial officer who has constitutional authority and accounts for the decisions in an institution. The discussion on the future of justice shouldn't be about AI versus judges but rather about how AI can support judges. The future of justice should not be about AI versus judges but about AI to assist judges. What is better suited is the model of "AI under judges. The role of technology is to equip judges better to do their job—more informed, more efficient, and more empowered judges—but not to supplant human and constitutional principles that are the basis of judicial legitimacy. AI is able to provide an estimate for the answer; a constitutionally enfranchised judicial process can only provide a valid determination as to the just answer.

References

- Bell, F., Bennett Moses, L., Legg, M., Silove, J., & Zalnieriute, M. (2023). AI decision-making and the courts: A guide for judges, tribunal members and court administrators. *Australasian Institute of Judicial Administration*.
- Bodul, D. (2023). Can Artificial Intelligence (AI) Replace the Judge?. *Harmonius: J. Legal & Soc. Stud. Se. Eur.*, 15.
- Cromvelle, D. S. (2025). Algorithmic discrimination and equal protection law: legal remedies for Ai Bias in automated decision making. *International Journal of Law, Policy and Scientific Research*, 1(1), 1-12.
- Dolidze, T. (2026). Artificial Intelligence in Judicial Decision-Making: Can a Robot Replace a Judge?. *Law & World*, 37, 6.
- Gewirtz, J. M. (2024). Artificial intelligence may assist, but can never replace, the judicial decision-making process of human judges. *Fla. BJ*, 98, 8.

- Gioia, G. (2025). Artificial Intelligence (AI) and judicial independence: Balancing transparency and control. *Trauma and Memory*, 12(3), 100-114.
- Gul, S., Ahmad, R., & Rahman, S. U. (2025). Constitutional Dualities: Reconciling Islamic Normativity with Common Law Principles in Hybrid Legal Systems. *Indus Journal of Social Sciences*, 3(2), 674-693.
- Gul, S., Malik, W., & Qureshi, G. M. (2025). Cybersecurity And Sovereignty: The Role Of International Law In Governing State Behaviour In Cyberspace. *Policy Journal of Social Science Review*, 3(5), 121-135.
- Gul, S., Saman, A., & Ahmad, F. (2025). The Convergence of Human Rights and Humanitarian Law: Recalibrating Legal Boundaries in Contemporary Conflict. *The Critical Review of Social Sciences Studies*, 3(2), 1391-1403.
- Malik, W., & Gul, S. (2024). Bridging the gap: Exploring the intersection of cybersecurity and human security in the digital age. *Competitive Research Journal Archive*, 2(04), 195-202.
- Schmitz-Berndt, S. (2024). Interfering with Judicial Independence?: The Legal Constraints in the Realm of AI-Powered Judicial Decision-Making. *AIRe: Journal of AI Law & Regulation*, 1(2), 199.
- Smuha, N. A. (2026). Artificial Intelligence in the Judiciary: A Threat to the Rule of Law?.
- Tumanov, D. A. (2024). Can artificial intelligence replace human judges?. *Digital LJ*, 5, 10.