ARTIFICIAL INTELLIGENCE – CAN JUDGES EFFECTIVELY MONITOR IS ETHICAL USE IN THE COURTROOM?

Justice John Carey[1]

The concept of Artificial Intelligence (**AI**) for many appears to be an enigma. I suppose with a background in engineering, science, and technology it may be more logical in terms of process and systems. For experienced jurists such as those in this room whose level of sophistication in thought process is far above the ordinary man, it is not incomprehensible. As a Professor of Law in University once told me, those of you who are in this room will not be successful at law if you are intellectually deficient. In this regard, I am confident that each of us in this room will be able to assess the argument that I put forward that judges can effectively monitor the ethical use of artificial intelligence in the Courtroom.

In the short term it is projected that AI will support and not replace judges[2]. When one compares judicial AI with human judges the AI has limitations because it is based on algorithms, data and not organic intelligence as we are[3].

In one of the cases that we had this year in PNG it involved written submissions which were provided to the Court by a lawyer in where there were fake legal authorities and case summaries generated by the AI tool ChatGPT. In *Peter Gilmai v Abel Tol & Others*[4] the learned judge said,

> *"It may be that the lawyer did not know that the authorities she "researched" on ChatGPT were fake. However, that is not the point. She did not check them. She signed off on them. If I had blindly accepted that counsel had done her work, in*

---

[1] Justice of the National and Supreme Courts of Papua New Guinea and Judge Administrator, Papua New Guinea Centre for Judicial Excellence in Port Moresby, Papua New Guinea

[2] Campbell, R. (2023). Artificial Intelligence in the Courtroom: The delivery of justice in the age of Machine Learning, *Revista Forumul Judecatorilor* 15

[3] Xu, Z. (2021). Human Judges in the Era of Artificial Intelligence: Challenges and Opportunities. *Applied Artificial Intelligence*, 36(1). https://doi.org/10.1080/08839514.2013652

[4] [2025] PGNC 164

the discharge of her duty to the law, the Court, and her client, and if I had blindly included those fake authorities in my judgment, it would have promulgated a complete falsehood. The Courts expect the highest professional and ethical standards from the legal profession to assist them in the administration of justice in this country. Providing fake authorities and fake summaries of those authorities is entirely inconsistent with that sacred obligation."

The aforementioned case is an example of where a judge in PNG monitored effectively the ethical use of AI in her Court. While it was not purely a hallucination in the Court submission given it was a submission by lawyer who owed a duty to the Court to ensure that the information generated by AI should have been correct, it was a combination of either dishonesty and hallucination or negligence and hallucination. The Judge through recognition that a hallucination was in the Court submission was able to ensure that there would not be allowed an abuse of the court process by the actions of the lawyer. Hallucination in AI is something that is generated which contains false or erroneous information and is presented as a fact.

AI is everywhere and we use it daily and with typing in google search the words judicial intelligence the AI overview provides you with information. In a 2024 survey of judges in Portugal, it was found that, *"Judges consider that Legal AI technologies may have a positive impact in some legal principles....Judges are strongly concerned about the de-humanization of Justice. They consider that assessing evidence, analyzing arguments, and deciding on a legal case should be inherently human."*[5]

However, AI can have biases correlated to the design algorithm models developed in its application[6]. It is then necessary for Judges to be aware and competent in relation to ensuring that AI does not replace their reasoning skills and capabilities in decision making. In a recent US case in Alabama in July 2025, a United States District Court judge sanctioned a Partner of a Law firm who admitted to using AI generated citations and filing them without verification as it was deemed to amount to bad faith[7].

[5] Martinho, A.(2025). Surveying Judges about artificial intelligence: profession, judicial adjudication, and legal principles. *AI & Soc* **40**, 569–584. https://doi.org/10.1007/s00146-024-01869-4

[6] Terzidou, K. (2022). The Use of Artificial Intelligence in the Judiciary and its Compliance with the Right to a Fair Trial, 31 *Journal of Judicial Administration* 154, Available at SSRN: https://ssrn.com/abstract=4495715

[7] (Johnson v Dunn, 2025)

It is posited that technology ought to play a role in our judicial system, but this can only happen when judges in their humanity are engaged to facilitate this[8]. AI in reduction of backlog cases and improving Court efficiency may be beneficial[9]. In spite of these seeming benefits there are ethical challenges. These include:

> "*Lack of transparency of AI tools: AI decisions are not always intelligible to humans.*
>
> *AI is not neutral: AI-based decisions are susceptible to inaccuracies, discriminatory outcomes, embedded or inserted bias.*
>
> *Surveillance practices for data gathering and privacy of court users.*
>
> *New concerns for fairness and risk for Human Rights and other fundamental values.*"[10]

These challenges have not stopped China, Estonia, Taiwan, Canada, the UK and Mexico from using AI in the justice system[11]. Effectively using AI in the Courtroom is dependent on the legal and ethical framework that regulates its use[12]. Whether a computer can replace a judge is unclear and while there are areas in judicial decision making where it is possible and probable, there are aspects such as being able to have mercy or empathy that it is hard to envision[13].

This indicates there is a need for transparency to secure the public trust when including AI in the judiciary[14]. In some countries where AI is used in the

---

[8] Sourdin, T., Cornes, R. (2018). Do Judges Need to Be Human? The Implications of Technology for Responsive Judging. In: Sourdin, T., Zariski, A. (eds) The Responsive Judge. Ius Gentium: Comparative Perspectives on Law and Justice, vol 67. Springer, Singapore. https://doi.org/10.1007/978-981-13-1023-2_4

[9] Buckland, R. (2023). AI, Judges and Judgment: Setting the Scene. *M-RCBG Associate Working Paper Series*. 220, Harvard University, Cambridge, MA, USA. Available at: https://www.hks.harvard.edu/sites/default/files/centers/mrcbg/working.papers/Final_AWP_220.pdf

[10] Unesco. (2023). Readiness assessment methodology: a tool of the Recommendation on the Ethics of Artificial Intelligence. Web Archive. https://doi.org/10.54678/YHAA4429

[11] Sourav, R. (2025). Relying on AI in Judicial Decision-Making: Justice or Jeopardy? *Public Policy.IE*. UCD Institute for Public Policy, Ireland. Available at: https://publicpolicy.ie/papers/relying-on-ai-in-judicial-decision-making-justice-or-jeopardy/

[12] Jadidi, V. (2025). The Impact of Artificial Intelligence on Judicial Decision-Making Processes. (e222612). *Advanced Journal of Management, Humanity and Social science*, (), e222612 doi: 10.5281/zenodo.15660093

[13] Zalucki, M. (2021). Computers in gowns and wigs. Some remarks about a new era of judiciary? Artificial Intelligence and Human Rights. Madrid, Spain. Available at: https://www.dykinson.com/libros/artificial-intelligence-and-human-rights/9788413778174/

[14] Fine A, Berthelot ER, Marsh S. Public Perceptions of Judges' Use of AI Tools in Courtroom Decision-Making: An Examination of Legitimacy, Fairness, Trust, and Procedural Justice. Behav Sci (Basel). 2025 Apr 6;15(4):476. doi: 10.3390/bs15040476. PMID: 40282097; PMCID: PMC12024057.

Courtroom there are no safeguards in relation to fair application and use[15]. It is therefore important that judiciaries using AI operate in accordance with an ethical code and the AI performs all assigned duties as well as the human judge[16]. The Bangalore Principles of Judicial Conduct highlight six core values which include: Independence, Impartiality, Integrity, Propriety, Equality, Competence and diligence[17]. As judges and judicial officers, we integrate these core values in our conduct, and this should also extend to how we use AI or allow AI to be used in our Courtrooms.

"In the Bangalore Principles of Judicial Conduct, European Convention on Human Rights and European Commission for the Efficiency of Justice Ethical Charter on the Use of AI in judicial proceedings they indicate the following:

1. Fundamental rights: ensuring that the design and implementation of artificial intelligence tools and services are compatible with fundamental rights.

2. Non-discrimination: Specifically preventing the development or intensification of any discrimination between individuals or groups of individuals.

3. Data quality and security: with regard to the processing of judicial decisions and data, using certified sources and intangible data with models conceived in a multidisciplinary manner, in a secure technological environment.

4. Transparency, impartiality and fairness: making data processing methods accessible and understandable, authorising external audits.

5. User agency: precluding a prescriptive approach and ensuring that users are informed actors and in control of their choices."[18]

The preceding is instructive and can assist us in how we engage AI in our Courtrooms. We should also come to terms with some realities that whether we

[15] Socol de la Osa, D.U., & Remolina, N. (2024). Artificial Intelligence at the bench: Legal and ethical challenges of informing – or misinforming – judicial decision – making through generative AI. *Data & Policy*, 6, e59. Doi:10.1017/dap.2024.53

[16] Dymitruk, M. (2019). Ethical Artificial Intelligence In Judiciary. *Research Centre for Legal and Economic Issues of Electronic Communication Uniwersytecka* 7/10, 50-145 Wroclaw, 616 PL-DS. Available at https://www.researchgate.net/profile/Maria-Dymitruk/publication/333995919_Ethical_artificial_intelligence_in_judiciary/links/5d5c309992851c37636e0eda/Ethical-artificial-intelligence-in-judiciary.pdf

[17] UNODC. (2002). The Bangalore Principles of Judicial Conduct. Vienna, Austria. https://www.unodc.org/documents/ji/training/bangaloreprinciples.pdf

[18] Burrows, H. (2023). Deploying Artificial Intelligence In Courts. Available at: https://documents1.worldbank.org/curated/en/099061623070510704/pdf/P1795020467e21090a1d9011471dbdb0e0.pdf

can at this stage monitor the ethical use of AI in our Courtrooms or not, the technology is here and we will have to learn to adapt or natural attrition will address this.

In applying AI in our Courtrooms there should be a comprehensive evaluation of the 'legal and ethical dimensions' of implementing AI[19]. Functioning on the construct that AI may be more efficient or effective than yourself as a human being in your role as a judge is probably not an appropriate proposition to adopt. However, embracing technological realities, public expectations, executive and legislative tensions and the critics of judicial performance can even with a perfunctory focus is more relevant and aligned with what we ought to anticipate in the advancement of AI and its use in courtrooms that we either currently function in now or will be operating in shortly.

There are many who espouse the view that retirement cannot come soon enough so this will be a challenge for the next generation of judicial officers. A recent study in the Indonesian Courts published in June 2025 found that AI can increase efficiency while positively contributing to reduction of backlog cases, which also involved a corelating information from Singapore and Estonia given those two examples demonstrated the need for 'regulations and ethical safeguards'[20].

The requirements of litigants are that justice will be dispensed at a faster and more efficient pace than ever before. When you examine what AI is capable of doing in terms of 'document review, legal research, contract analysis, case prediction and decision-making' this can revolutionise that way courts function[21]. In each of your jurisdictions you have either experienced or read about colleagues interacting with lawyers whose submissions are based on AI and invariably a few of your have had to admonish or refer counsel for discipline for unethical use of AI either knowingly or unknowingly.

Transparency in the Courtroom supports judicial impartiality. Using AI without accountability and clarity is likely to adversely impact 'judicial independence and

---

[19] Balakrishnan, A. (2024). Ethical and Legal Implications of AI Judges: Balancing Efficiency and the Right to a Fair Trial. https://studenttheses.uu.nl/handle/20.500.12932/48242
[20] Arbani, TS (2025). Algorithmic Justice: A Study on Risks and Opportunities in the Use of Artificial Intelligence by Judges in Courts. *Siyasah* , *5*(1), 27-49. https://doi.org/10.32332/9g12ds17
[21] John, A. M., A. M. U. And Panachakel, J. T. (2023). Ethical Challenges of Using Artificial Intelligence in Judiciary. IEEE International Conference on Metrology for eXtended Reality, Artificial Intelligence and Neural Engineering (MetroXRAINE), Milano, Italy, 2023, pp. 723-728, doi: 10.1109/MetroXRAINE58569.2023.10405688.

impartiality'[22]. AI uses algorithms which adjust to make predictions in their outcomes which can often be difficult to assess how they arrive that this conclusion[23]. Relying solely on algorithms to make decisions have inherent risks[24]. In addition, there is a lack of expertise that exists in most judiciaries in the deployment of AI and its trustworthiness in the courtroom[25].

It is argued that the current capability of AI to replace judges in the Courtroom is near impossible given the general nature of the work that we do and that AI is more suited for specific tasks to support our judicial work[26]. In my research in this area I am unable to say definitively whether this is indeed the case. I am able to confirm that with the rapid change in technology and the fact that AI is being applied to enhance the quality of life of all human beings and it is driven by economic benefit by innovative and investment-oriented factors, we should not be surprised at what the future holds in its ability for applications in our judiciaries.

On 26 August 2025, the United Nations General Assembly adopted several resolutions but notably one establishing a scientific panel on AI and a global dialogue on its governance to promote sustainable development and bridge digital divides[27]. This is a further indication of the significance of AI and that the focus and attention of the global community is such that it requires further evaluation for governance.

As more of us use AI or allow for the use of AI in our courtrooms, I will suggest the following five ideas for your consideration. They are:

1) "Engage – Understand the potential and limitations of AI.
2) Secure – Keep cybersafe.
3) Protect – Maintain confidentiality and privacy.

[22] Zalnieriute, M. (2021). Technology and the Courts: Artificial Intelligence and Judicial Impartiality. Submission to Australian Law Reform Commission Review of Judicial Impartiality, Available at SSRN: https://ssrn.com/abstract=3867901 or http://dx.doi.org/10.2139/ssrn.3867901

[23] Deeks, A. (2019). The Judicial Demand For Explainable Artificial Intelligence. *Columbia Law Review, Vol. 119, No. 7, Symposium:Common Law for the Age of AI,* pp.1829-1850

[24] Mirzakhakimova, S. (2025). Robot Judges, Artificial Intelligence, Bias Mitigation and the Future of Forensic Analysis. *International Journal of Artificial Intelligence*, 1(4) 2186-2195. Retrieved from https://inlibrary.uz.index.php.ijai/article/view/108540

[25] Cho, W., and Cain, B. (2023). Deploying Trustworthy AI in the Courtroom: Lessons from Examining Algorithm Bias in Redistricting AI. *U. Chi. Legal F. 87*, https://heinonline.org/HOL/LandingPage?handle=hein.journals/uchclf2023&div=7&id=&page=

[26] Campbell, R. (2023). Artificial Intelligence in the Courtroom: The Delivery of Justice in the Age of Machine Learning. *Revista Forumul Judecatorilor 15,* https://heinonline.org/HOL/LandingPage?handle=hein.journals/judioruie2023&div=23&id=&page=

[27] https://press.un.org/en/2025/ga12699.doc.htm

4) Check – All outputs from AI tools.
5) Observe – Be ready for reasonable courtroom use."[28]

AI judges may be more credible than human judges[29]. This may be the argument that some academics proffer. I would not necessarily concur with that position based on my own subjective views, however, it is within all of our realities to recognize that AI is here to stay and we can either embrace it to ensure its ethical use in our Courtrooms or perhaps be replaced by it with regulations that will inevitably come when AI judges become a fully functioning reality in our world.

---

[28] PNG Judiciary and Holt, A. (2025) AI and the Judiciary, Papua New Guinea
[29] Volokh, E. (2019). Chief Justice Robots.
https://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=3973&context=dlj