

Algorithms in the courtroom: Human rights and the dehumanization of judicial decision-making.

Abstract

*"We are not just heading toward a world of Big Brother or one composed of Little Brothers, but also toward a more mindless process—of bureaucratic indifference, arbitrary errors, and dehumanization— a world that is beginning to resemble Kafka's vision in The Trial."*¹

The use of computer algorithms in the courts is not an altogether new concept. The 90's have already seen the implementation of risk-assessment software programs in U.S. state courts, aimed at assisting judges in identifying recidivism in felons and evaluating proper sentencing accordingly.²

Such "risk-assessment tools" have come a long way since then. Current machine learning algorithms provide sentencing recommendations to the human judge after analyzing vast quantities of data and creating risk models. Similar programs provide recommendations in other contexts, such as pre-trial decisions to release or detain a defendant.³ In 2016, the use of this kind of software was even challenged in court in a high-profile case, *State v. Loomis*, at the Supreme Court of Wisconsin.⁴ The Court approved the use of the risk-assessment tool. However, it noted that the algorithm should not be conclusive but should only be considered as a factor among other relevant considerations to be considered. The Court thus emphasized the importance of a judge's discretion when using such a tool, which is merely a tool aimed at providing the court with more complete and accurate information.⁵

While algorithms do not replace the human judge entirely, yet, technological developments make this possibility more tangible than ever, and different countries are in the midst of developing systems of judicial automated decision-making that could do just that.⁶

¹ D. Solve, *The Digital Person: Technology and Privacy in the Information Age*, NYU Press, 2004

² Kehl Danielle, Priscilla Guo, and Samuel Kessler. 2017. *Algorithms in the Criminal Justice System: Assessing the Use of Risk Assessments in Sentencing*. Responsive Communities Initiative, Berkman Klein Center for Internet & Society, Harvard Law School. (pp.9-11). (hereinafter: Kehl,Guo&Kessler)

³ Kehl,Guo&Kessler, p.9. Logan Kugler, *AI Judges and Juries*, *Communications of the ACM*, December 2018, Vol. 61 No. 12, Pages 19-21.

⁴ <https://www.wicourts.gov/sc/opinion/DisplayDocument.pdf?content=pdf&seqNo=171690>

⁵ Kehl,Guo&Kessler, 18-21. *State v. Loomis*, No. 2015AP157-CR (Wis. Ct. App. July. 13, 2016), para 71-74.

⁶ For example: projects such as algorithmic dispute-resolution mechanisms in **France**: <https://theconversation.com/predicting-justice-what-if-algorithms-entered-the-courthouse-91692>; Developing

These developments raise a set of legal and ethical questions which need to be addressed.

A primary aspect to consider is whether automated decision-making should be applied at all in judicial decision-making? Perhaps it should be limited to only certain areas of the law? Though the possibility of machines making judicial decisions within the framework of the criminal justice system is usually perceived as controversial, it is hard to ignore the possible advantages of embedding such technologies in other fields of law. For example, using algorithmic technologies in small claims courts, traffic courts, and the like, can actually enhance public access to judicial institutions through online access, and making the process faster, clearer and more cost-efficient.⁷ Automated decision-making algorithms could possibly serve to upend misconceptions, biases, and improve impartiality - in other words, to repair human errors which are inherent and perhaps impossible to eliminate entirely.⁸ Furthermore, some theories even point on the limitations of human cognitive in weighing a large number of factors, which judges are required to do within the framework of procedural rules that include a vast amount of considerations.⁹ Algorithms could help override these limitations.

A core issue is that of opacity versus transparency - the algorithm's "black box".¹⁰ Does an individual standing before a court have a right to fully understand the way in which the algorithm operates and the considerations which it takes into account. Another issue is whether the functioning of the algorithm truly allows the litigant to receive her day in the court. Does the litigant have the chance to present her case before a judge, and does she feel that she has control over the process.¹¹ Some of these concerns could perhaps be mitigated if different safeguards are applied, such as a right to receive explanations and a full transparent picture on the specific program.¹²

algorithm to replace the judge in small claims courts in **Estonia**: <https://www.wired.com/story/can-ai-be-fair-judge-court-estonia-thinks-so/>

"Legal robots" have been deployed in a pilot on thousands of cases in the eastern province of Jiangsu **China** to help decide sentencing: <https://www.telegraph.co.uk/news/2017/08/04/legal-robots-deployed-china-help-decide-thousands-cases/>

<https://theconversation.com/predicting-justice-what-if-algorithms-entered-the-courthouse-91692>;⁷

⁸ John Leubsdorf, Theories of Judging and Judge Disqualification, 62 N.Y.U. L. Rev. 237 (1987); Logan Kugler, AI judges and juries, Communications of the ACM, December 2018, Vol. 61 No. 12, Pages 19-21;

<http://harvardpolitics.com/covers/algorithmic-decision-making-to-what-extent-should-computers-make-decisions-for-society/>;

⁹ Levy, I., 2017. Simplifying legal decisions: Factor overload in civil procedure rules. *Melb. UL Rev.*, 41, p.727.

¹⁰ Ric Simmons, Big Data and Procedural Justice: Legitimizing Algorithms in the Criminal Justice System,

15 Ohio St. J. Crim. L. 573 (2018) (hereinafter: Simmons)

¹¹ Ibid, 580.

¹² Goodman, B. and Flaxman, S., 2017. European Union regulations on algorithmic decision-making and a "right to explanation". *AI Magazine*, 38(3), pp.50-57.

An important point to examine is whether the considerations underlying the debate regarding judicial automated decision-making are also the considerations that should be taken into account regarding the automation of non-judicial decisions, for example in administrative decisions taken by the government.¹³

And above all these concerns looms a basic, ethical and even philosophical question, and that is, whether we as humans *can* be judged by non-humans? Do we *want* to be judged by non-humans? In this regard another important aspect to consider is the notion of "jury of one's peers"; The basic principle that an individual should be judged by peers having the same legal status in society as that of the person who is standing in trial, aiming to protect the right to a fair trial.¹⁴

This ethical question also has a practical dimension, which is the challenge of public support – since non-human judges or a justice system will not carry through if the public will not believe and support in it. Studies show that one of the main reasons that people obey the law is because they believe in the legitimacy of the legal system. The "trustworthiness" of the algorithm is a key factor to gain legitimacy.¹⁵ Furthermore, judges are also policymakers. If the algorithm replaces judges – who is designing this policy?¹⁶ Here the question expands beyond the issue of due process and possibly marks a fundamental shift in the democratic structure.¹⁷

¹³ Williams, R.A., 2018. Rethinking Deference for Algorithmic Decision-Making. *Available at SSRN* 3242482.

¹⁴ *Strauder v. West Virginia*, 100 U.S. 303 (1880); Lewis H. LaRue, A Jury of One's Peers, 33 Wash. & Lee L. Rev. 841 (1976) ; Davin M. Stockwell, A Jury of One's (Technically Competent) Peers, 21 Whittier L. Rev. 645 (2000)

¹⁵ Simmons, 574.

¹⁶ Jacobsohn, G.J., 1977. Citizen participation in policy-making: the role of the jury. *The Journal of Politics*, 39(1), pp.73-96.

¹⁷ Aust, H. (2018). Undermining Human Agency and Democratic Infrastructures? The Algorithmic Challenge to the Universal Declaration of Human Rights. *AJIL Unbound*, 112, 334-338. doi:10.1017/aju.2018.86.