

Legal decisions should be automated using algorithms. Discuss.

An algorithm is “a set of mathematical instructions or rules that...will help to calculate an answer to a problem”<sup>1</sup>. From apps to financial transactions, algorithms play a crucial role in our lives, aiming to reduce bias and increase efficiency. This is true for the legal industry where algorithms are utilised to calculate the probability of prisoners reoffending, (which assist bail decisions in the US), predict defendant’s behaviour using previous cases and assess the likelihood of reoffending, aiding rehabilitation decisions. Algorithm use has advantages regarding efficiency and prejudices but simultaneously raises issues including the lack of transparency and threat to liberties.

Algorithms could rescue the under-funded and backlogged system. The UK case excess is at a ‘tipping point’ with around 45,500<sup>2</sup>. Combined with the lack of resources, the efficiency of algorithms is attractive. People favour algorithms to, for example, human judges as they assume they are bias-free. From dates (“An American study...suggested that on ‘sleepy Monday’... sentences imposed by judges were 5 per cent higher than any other day”<sup>3</sup>) to timings (“An Israeli study...showed that a prisoner’s chances of release receded to near zero as the clock ticked towards lunchtime, immediately

<sup>1</sup> 'ALGORITHM | Meaning In The Cambridge English Dictionary' (*Dictionary.cambridge.org*, 2021) <https://dictionary.cambridge.org/dictionary/english/algorithm> accessed 2 January 2021.

<sup>2</sup> Clive Coleman, 'Courts Backlog 'Tipping Point' For Justice System' (*BBC News*, 2021) <https://www.bbc.co.uk/news/uk-54737289> accessed 2 January 2021.

<sup>3</sup> The Secret Barrister, *Stories Of The Law And How It's Broken* (Macmillan 2018).

<sup>4</sup> Aleš Završnik. Criminal justice, artificial intelligence systems, and human rights. (*ERA Forum* 20, 567–583, 2020). <https://link.springer.com/article/10.1007/s12027-020-00602-0> Accessed 2 January 2021

<sup>5</sup> Clement-Jones, 'The Government’s Approach To Algorithmic Decision-Making Is Broken: Here’s How To Fix It' (*NS Tech*, 2020) <https://tech.newstatesman.com/guest-opinion/algorithmic-decision-making> accessed 2 January 2021.

<sup>6</sup> Aaron Smith, 'Attitudes Toward Algorithmic Decision-Making' (*Pew Research Center: Internet, Science & Tech*, 2018) <https://www.pewresearch.org/internet/2018/11/16/attitudes-toward-algorithmic-decision-making/> accessed 2 January 2021

after which the likelihood soared”<sup>3</sup>) to prejudices (Turkle claims that since the judicial system can be discriminatory, “disadvantaged African Americans would choose a computerised judge rather than a human”<sup>4</sup>) to personality “No two judges are the same, and two similar defendants might be sentenced entirely differently”<sup>3</sup>. Therefore, algorithms would make trials consistent so should be used.

Although, “The impact of automated decision-making systems across an entire population can be immense in terms of potential discrimination, breach of privacy., access to justice and other rights”<sup>5</sup>. In terms of discrimination, algorithms could “simply reinforce existing biases...under the guise of algorithmic neutrality”<sup>6</sup>. Displayed in crime prediction, which results in over and

<sup>1</sup> 'ALGORITHM | Meaning In The Cambridge English Dictionary' (*Dictionary.cambridge.org*, 2021) <https://dictionary.cambridge.org/dictionary/english/algorithm> accessed 2 January 2021.

<sup>2</sup> Clive Coleman, 'Courts Backlog 'Tipping Point' For Justice System' (*BBC News*, 2021) <https://www.bbc.co.uk/news/uk-54737289> accessed 2 January 2021.

<sup>3</sup> The Secret Barrister, *Stories Of The Law And How It's Broken* (Macmillan 2018).

<sup>4</sup> Aleš Završnik. Criminal justice, artificial intelligence systems, and human rights. (*ERA Forum* 20, 567–583, 2020). <https://link.springer.com/article/10.1007/s12027-020-00602-0> Accessed 2 January 2021

<sup>5</sup> Clement-Jones, 'The Government's Approach To Algorithmic Decision-Making Is Broken: Here's How To Fix It' (*NS Tech*, 2020) <https://tech.newstatesman.com/guest-opinion/algorithmic-decision-making> accessed 2 January 2021.

<sup>6</sup> Aaron Smith, 'Attitudes Toward Algorithmic Decision-Making' (*Pew Research Center: Internet, Science & Tech*, 2018) <https://www.pewresearch.org/internet/2018/11/16/attitudes-toward-algorithmic-decision-making/> accessed 2 January 2021

under-policing, making justice disproportional. Also, even if human judges have prejudices “the impact of their case-by-case decisions has nowhere near the magnitude or scale that a single flawed automated decision-making system can have across an entire population”<sup>5</sup>. Algorithm use could have a ‘black box’<sup>7</sup> effect, where decision-making is not transparent, which is a problem as in legal decisions the reasoning behind the conclusion is significant. Where algorithms are used for case allocation they are monitored independently. This factor affecting justice, and potentially the right to a fair trial is unclear, and until fixed, algorithms should not be used. The House of Lords select committee said algorithms should not be used “which could have a substantial impact on an individual’s life, unless [they] can generate a full and satisfactory explanation for the decisions it will take”<sup>8</sup>. Algorithms could threaten a fair trial, as the defendant should effectively participate and if the algorithm cannot be questioned, this cannot happen. Algorithms in decisions could be inaccurate as they consider specific variables and are inflexible, so could miss out vital facts, compromising justice.

To summarise, algorithm use is a ‘pharmakon’ to the legal industry, a remedy and a poison. It could cure the under-funded, backlogged and biased system but also result in more prejudice and threaten our right to a fair trial. So, until precautions are put in place to ensure the judicial system’s foundations are not undermined, legal decisions should not be automated using algorithms.

<sup>7</sup> Dallas Card, 'The “Black Box” Metaphor In Machine Learning' (*towards data science*, 2017) <https://towardsdatascience.com/the-black-box-metaphor-in-machine-learning-4e57a3a1d2b0> accessed 2 January 2021.

<sup>8</sup> 'AI In The UK: Ready, Willing And Able? - Government Response To The Select Committee Report' (*GOV.UK*, 2018) <https://www.gov.uk/government/publications/ai-in-the-uk-ready-willing-and-able-government-response-to-the-select-committee-report> accessed 2 January 2021.

## Bibliography

Allen F, 'AI And Algorithmic Decision-Making In The Public Sector And Criminal Justice System | Public Law Blog | Kingsley Napley' (*Kingsleynapley.co.uk*, 2020)

<https://www.kingsleynapley.co.uk/insights/blogs/public-law-blog/ai-and-algorithmic-decision-making-in-the-public-sector-and-criminal-justice-system> accessed 2 January 2021

Binns, R 'Human Judgment in algorithmic loops: Individual justice and automated decision-making' (*Regulation & Governance*, 2020). <https://doi.org/10.1111/rego.12358> accessed 2 January 2021

Card D, 'The “Black Box” Metaphor In Machine Learning' (*towards data science*, 2017)

<https://towardsdatascience.com/the-black-box-metaphor-in-machine-learning-4e57a3a1d2b0>  
accessed 2 January 2021

Clement-Jones, 'The Government's Approach To Algorithmic Decision-Making Is Broken: Here'S How To Fix It' (*NS Tech*, 2020) <https://tech.newstatesman.com/guest-opinion/algorithmic-decision-making> accessed 2 January 2021

Coleman C, 'Courts Backlog 'Tipping Point' For Justice System' (*BBC News*, 2021)

<https://www.bbc.co.uk/news/uk-54737289> accessed 2 January 2021

Criswell B, 'Algorithms Deciding The Future Of Legal Decisions | Montreal AI Ethics Institute'

(*Montreal AI Ethics Institute*, 2020) <https://montrealethics.ai/algorithms-deciding-the-future-of-legal-decisions/> accessed 2 January 2021

Irving A, 'Rise Of The Algorithms - UK Human Rights Blog' (*UK Human Rights Blog*, 2019)  
<https://ukhumanrightsblog.com/2019/11/04/rise-of-the-algorithms/> accessed 2 January 2021

Miller A, 'Want Less-Biased Decisions? Use Algorithms.' (*Harvard Business Review*, 2018)  
<https://hbr.org/2018/07/want-less-biased-decisions-use-algorithms> accessed 2 January 2021

Stiefel M and others, 'Can People Trust The Automated Decisions Made By Algorithms?' (*InfoQ*, 2018) <https://www.infoq.com/articles/Can-People-Trust-Algorithm-Decisions/> accessed 2 January 2021

Smith A, 'Attitudes Toward Algorithmic Decision-Making' (*Pew Research Center: Internet, Science & Tech*, 2018) <https://www.pewresearch.org/internet/2018/11/16/attitudes-toward-algorithmic-decision-making/> accessed 2 January 2021

The Secret Barrister, *Stories Of The Law And How It's Broken* (Macmillan 2018)

Završnik, A. Criminal justice, artificial intelligence systems, and human rights. (*ERA Forum* **20**, 567–583, 2020). <https://link.springer.com/article/10.1007/s12027-020-00602-0> Accessed 2 January 2021

'AI In The UK: Ready, Willing And Able? - Government Response To The Select Committee Report' (*GOV.UK*, 2018) <https://www.gov.uk/government/publications/ai-in-the-uk-ready-willing-and-able-government-response-to-the-select-committee-report> accessed 2 January 2021

'ALGORITHM | Meaning In The Cambridge English Dictionary' (*Dictionary.cambridge.org*, 2021)  
<https://dictionary.cambridge.org/dictionary/english/algorithm> accessed 2 January 2021

'Article 6: Right To A Fair Trial | Equality And Human Rights Commission'

(*Equalityhumanrights.com*, 1998) <https://www.equalityhumanrights.com/en/human-rights-act/article-6-right-fair-trial> accessed 2 January 2021

'Legal Aid: UK's Top Judge Says Cuts Caused 'Serious Difficulty' (*BBC News*, 2019)

<https://www.bbc.co.uk/news/uk-50923289#:~:text=Legal%20aid%20cuts,-Legal%20aid%20is&text=Cuts%20to%20legal%20aid%20came,longer%20eligible%20for%20public%20funds.> accessed 2 January 2021