

Simcocks Partnership with Schools: Essay Writing Competition

How will AI transform the courtroom of the future?

'Is artificial intelligence less than our intelligence?' - Spike Jonze.

Artificial intelligence (AI) is described in the Oxford English Dictionary as 'the capacity of computers or other machines to exhibit or simulate intelligent behaviour'.¹ Advancement in AI is occurring at an alarming rate in all aspects of society. Consequently, the introduction of AI into our legal system will all too soon become a reality. So how will this technological development transform the courtrooms of the future?

Firstly, we must note the positive impact that AI could potentially have upon our legal system. AI systems such as Siri or Amazon Alexa have a larger intellectual capacity than the average human brain. Storing millions of bytes of data, this AI technology is able to recount answers to numerous complex questions in a matter of seconds. This is hardly surprising given the fact that the human brain has multiple functions, of which 'intelligence' is merely one.² With this in mind, AI systems could be hugely beneficial to lawyers in the future, in two main respects: accuracy and time management.

In the United States, a study was conducted to compare the accuracy of lawyers in 'reviewing and approving everyday contracts' in comparison with AI systems.³ The results showed that AI had a 94% accuracy rate compared with an 85% average over the 20 lawyers who participated in the study, thus reflecting the superiority of AI in analysing data.

Using pattern recognition, AI systems can recall information at alarming speeds, which has clear benefits for the judicial process. The preparation required for cases to go to trial involves an extensive examination of previous cases. This time consuming task is undertaken to discover legal precedence and help formulate a grounded argument. Current statistics suggest that the average Civil court trial is scheduled to take place between a year and 18 months after the initial motion is filed.⁴ With its expert catalogue of information, AI could drastically reduce this waiting period, which would undoubtedly have psychological, economic and ethical benefits for both the accuser and the accused.

The Estonian government has given further thought to the potential role of AI in the courtroom itself. This year they plan to conduct a trial to explore the use of an 'AI judge' to preside over Small Claims court judgements.⁵ The success of this endeavour would mean that lawyers could focus their time and attention on more complex cases. Furthermore, as each AI system can be programmed to recall the same information, its use would ensure a uniformity among cases. One need only note the disparity between sentencing for criminal trials documented in the media to understand the importance of this fact.

Moreover, AI has shown itself to also have benefits as a key witness in criminal cases. For example, in 2017 the voice recording capacities of an Amazon Echo smart speaker provided invaluable evidence in the prosecution of a double murder case in the US.⁶

¹ 'artificial intelligence', *Oxford English Dictionary Online*.

² Nelson Ricks, 'Is artificial Intelligence smarter than humans?', [quora.com](https://www.quora.com/Is-artificial-intelligence-smarter-than-humans).

³ 'AI VS. Lawyers: The Ultimate Showdown', [LawGeex.com](https://www.lawgeex.com/).

⁴ 'Why does a lawsuit take so long?', [MillerLawpc.com](https://www.millerlawpc.com/).

⁵ Eric Niler, 'Can AI be a fair judge in court? Estonia thinks so', [wired.com](https://www.wired.com/).

⁶ Anthony Cuthbertson, 'Amazon ordered to give Alexa evidence in double murder case', [intependent.co.uk](https://www.independent.co.uk).

However, this is not to suggest that AI systems are without their limitations. As a form of computer technology, malfunctions are inevitable. As Lavoie, Vice President of Canada's leading IT firm summarises, 'As a human, if you make a mistake you just correct it, but in the AI world if the machine doesn't learn how to correct their own mistakes then that creates more problems.'⁷ In the legal system, an AI glitch could without doubt result in a wrongful, life-altering conviction. Given the fact that it takes weeks of human intervention to override an AI error,⁸ mistakes in judgement could be replicated in multiple cases over a short period of time. The consequences of this could be catastrophic.

With the increasing use of technology in today's society, there is a higher threat to our personal security. A report from the Future of Humanity Institute in 2018 stated that AI technology could be 'exploited for malicious purposes' as a tool for leaking confidential information.⁹ Moreover, it becomes harder to detect when this evidence has been tampered with.

Perhaps the most significant issue with the use of AI in the legal system, is that it lacks human empathy. In particularly sensitive situations, such as family court, empathy is required to understand a person's situation and their relationships with others. No court case is ever black and white as a judgement requires many factors to be taken into consideration. An AI system operates purely on facts and figures, and whilst it can be programmed to mimic human behaviour it 'cannot and will never learn emotions that are innate in humans'.¹⁰

Finally, Professor Gerald Crabtree at Stanford University claims that instead of providing us with more information, AI systems are in fact reducing our human intellectual capacity: 'rather than getting cleverer, human intelligence peaked several thousand years ago and from then on there has been a slow decline in our intellectual and emotional abilities.'¹¹

So to summarise: how will this technological development transform the courtrooms of the future? At the moment, it is too early to say. Whilst the use of AI would have definite advantages in all aspects of legal work, inside and out of the courtroom, there are several potential dangers which come with this technology. As Storoni makes clear, 'We still don't completely understand how the brain works and yet we're building machines to replicate it'.¹² Only time will tell how AI will transform our world. Perhaps, the results of Estonia's study will give us a better insight into how our legal system may or may not be enhanced by the addition of AI to our courtrooms.

⁷ Michelle Singerman, 'What it means for humans when AI-powered programs fail', cpacanada.ca.

⁸ Michelle Singerman, 'What it means for humans when AI-powered programs fail', cpacanada.ca.

⁹ Tom Jowitt, 'Facebook stored millions of passwords unprotected', silicon.co.uk.

¹⁰ Geoff Colvin, 'The robot takeover lacks empathy', wired.co.uk.

¹¹ 'Humans are slowly but surely losing intellectual and emotional abilities, article suggests', sciencedaily.com.

¹² Mithu Storoni, 'The scientist who studied Einstein's brain learned that these 5 factors make you smarter', inc.com.