

DE JURE NEXUS LAW JOURNAL

Author:

Apoorva BN

MS Ramaiah College of Law, Bangalore

5th Year, BA; LL.B. (Hons.).**APPLICATION OF ARTIFICIAL INTELLIGENCE IN THE LEGAL
INDUSTRY****ABSTRACT**

Artificial intelligence (AI), also known as machine or computer intelligence, is the replication of human intelligence in machines that are encoded to think and perform acts like humans. AI can perform tasks like learning and problem solving. AI has been evolving at a rapid rate across the globe and application of AI in almost every industry is inevitable. AI is used in healthcare via robot assisted surgery processes, virtual assistants for nursing, dosage error reduction, clinical trial participation among others.¹ AI advancements have also contributed a great deal to the automotive industry by way of inventing self-driving/ driverless vehicles.² Various governments use AI for surveillance, facial and speech recognition.³ AI also has advanced applications in military, audits, administration and the legal industry. In this article, we will focus on the applications that AI has on the legal industry and lawyers per se.

¹SHAILENDRA SINHASANE, MOBISOFT, *TOP 15 PROMISING AI APPLICATIONS IN HEALTHCARE*; <https://mobisoftinfotech.com/resources/blog/top-15-ai-applications-in-healthcare/>

² MICRON, *ON THE ROAD TO FULL AUTONOMY: SELF-DRIVING CARS WILL RELY ON AI AND INNOVATIVE MEMORY*; <https://www.micron.com/insight/on-the-road-to-full-autonomy-self-driving-cars-will-rely-on-ai-and-innovative-memory#:~:text=AI%20is%20a%20critical%20technology,make%20decisions%20like%20a%20human.>

³DANIEL FAGELLA, EMERJ, *ARTIFICIAL INTELLIGENCE FOR GOVERNMENT SURVEILLANCE – 7 UNIQUE USE-CASES*; <https://emerj.com/ethics-and-regulatory/artificial-intelligence-government-surveillance/>

INTRODUCTION—WHAT IS AI?

Today, due to rapid development of AI in the world, it is almost impossible to think of a world without AI. AI has its impact and parallel applications in almost all industries and professions in the world. Right from Software/IT Companies to a mere smartphone owned by an individual, AI has it all covered. What exactly is AI, then? Artificial intelligence is a computer's intelligence where it attempts to perform all tasks that are performed by human beings based on the data fed to it by way of instructions in coding languages. Coding languages like JAVA, PYTHON, C++, C etc., are used by coders to write up a code that contains instructions directing the computer to act in a certain way. These codes consist of algorithms based on mathematical models on large data sets for a desired output. Due to its versatile and varied applications, AI today has made its place inevitable in almost all fields including Healthcare, IT applications, Academia, Administration, legal industry etc.

APPLICATION OF AI IN LEGAL RESEARCH

As humans of legal profession, we understand the importance of legal research in our world. Everything, even a single line of argument or a piece of knowledge, is acquired via legal research. Due to legal search engines like WestLaw, LexisNexis and Manupatra, we are able to access judgments in a jiffy—thanks to AI. Search engines, including the generic ones like Google, Bing, etc., work on AI. *Ross Intelligence*, having its headquarters in San Francisco, is a legal research engine that uses AI to power legal processes thus increasing efficiency and is also cost effective. ROSS uses NLP (Natural language processing) to search and provide legal information from citations to legal briefs.⁴ Casetext is another company that is developing a research platform that has more refined semantic understanding of actual interpretations of legal advices.⁵

APPLICATION OF AI IN LITIGATION

AI is being used to predict the result of pending cases. The more accurate the predictions become, greater the impact of AI is on litigation. This is often utilized by companies to

⁴ FORBES, *Ross Intelligence*; <https://www.forbes.com/profile/ross-intelligence/#302311be1e85>

⁵ ROB TOEWS, FORBES, *AI Will Transform The Field Of Law*; <https://www.forbes.com/sites/robtoews/2019/12/19/ai-will-transform-the-field-of-law/#301398fb7f01>

strategize their dispute settlement and litigation tactics. *Blue J Legal* is a start-up which is developing a legal prediction engine powered by AI with an initial focus on tax law.⁶ For example, the algorithm developed by Professor Daniel Katz empowers to foresee US Supreme Court case conclusions with 70.2 % accuracy⁷. The algorithm developed by Mr. Katz utilizes input data about the case like the parties, aspect of law, circuit court, the judgment at lower courts, area of issue, contextual information like name of judge, age and gender of judge and tendencies of Supreme Court, lower courts in predicting the outcome.⁸

APPLICATION OF AI IN CONTRACTS

Smart contracts are lines of code entrusted in block-chain technology and the contract is automatically executed once the terms of the contract are met with. For this purpose, smart contracts use AI. AI also uses the data of previously negotiated deals of the parties to put forth similar terms and make settlements more likely. The block-chain technology is used to secure contracts and the AI mechanism completely by securing the transaction with minimum risk of hacking or data theft. It also reduces the costs involved as there are no intermediaries involved. The better the AI technology used, the smarter the contract is. In this way, AI has made its way into contracts.

AI also assists in document/ contract review processes. Among many, *eBrevia* is a company that claims to analyse more than 50 documents in less than a minute, 10 percent more accurate than a manual review process.⁹ They initiated a start-up in partnership with Columbia University with the aim of limiting the document review process. The company also proposes accurate results by training its software to alter specific necessities of firms that need thousands of documents for review at a rapid scale. *Neota Logic System* asserts that its software *PerfectNDA* limits the non-disclosure agreement (NDA) process by proposing templates selected by AI according to the user's scenario. The user answers relevant questions posed by the AI and a pre-filled NDA is then generated.¹⁰ Predictive analysis has been extensively acknowledged as a document review system by US courts since the 2012

⁶MALLIKA RANGAIAH, ANALYTIC STEPS, *Artificial Intelligence in the Law Industry*; <https://www.analyticssteps.com/blogs/artificial-intelligence-law-industry>

⁷HENRIK TRASBERG, TILBURG UNIVERSITY LAW SCHOOL, *QUANTITATIVE LEGAL PREDICTION AND THE RULE OF LAW*; <http://arno.uvt.nl/show.cgi?fid=149307>

⁸*Ibid*

⁹DANIEL FAGGELLA, EMERJ, *AI in Law and Legal Practice – A Comprehensive View of 35 Current Applications*; <https://emerj.com/ai-sector-overviews/ai-in-law-legal-practice-current-applications/>

¹⁰*Ibid*.

decision in *Da Silva Moore v. PublicisGroupe*¹¹. In addition to this, in the remote Chinese province of Qinghai, robots are deployed to provide legal services to people who live in areas with limited number of human lawyers.¹²

APPLICATION OF AI IN INTELLECTUAL PROPERTY

Intellectual property filing, audit and prosecution processes are very time consuming. *ANAQUA Studio* are using an AI software law to develop cloud based applications that can abridge the patent drafting and application processes¹³. The AI can detect improper assertions, format defects and document faults. *TrademarkNow* is a company that uses a multifaceted algorithm that will limit long searches for patents, registered products and trademark using the *Trademark Clearance platform*, which yields search results in less than 15 seconds.¹⁴ Moreover, WIPO's research on Artificial Intelligence is controlled by the Advanced Technology Applications Center (ATAC) that works on developing tasks and processes at WIPO, thus making its place in IP administration. WIPO uses AI in 'WIPO Translate' using Machine translation, to conduct image search within the global data base and in automatic patent classification (IPCCAT).¹⁵ AI is therefore used for strategizing IP administration in countries all around the world.

DISADVANTAGES & POTENTIAL THREATS POSED BY AI

While the advent of AI has made our lives easier in more than expected aspects, rapid development of it across the globe has also caused some worries in many industries, including the legal sector. The downside of it that might be faced by lawyers in the near future include:

1. Lawyers are generally not well-equipped with technology. In this scenario, being aware of AI and how it works, making use of it and embracing it appear far-fetched.

¹¹ 287 F.R.D. 182 (S.D.N.Y. 2012)

¹² JOHN KANG & ANNA ZHANG, *NEED LEGAL ADVICE IN CHINA? ASK A ROBOT*; <https://www.law.com/2018/07/31/need-legal-advice-in-china-ask-a-robot/>

¹³ KC CHEUNG, *ALGORITHM-XLAB, TOP 10 APPLICATIONS OF AI IN LAW*, <https://algorithmxlab.com/blog/top-10-applications-artificial-intelligence-in-law/>

¹⁴ SUPRA NOTE 6

¹⁵ WIPO, *ARTIFICIAL INTELLIGENCE IN IP ADMINISTRATION*; https://www.wipo.int/about-ip/en/artificial_intelligence/ip_administration.html

2. Since AI can replicate human abilities, there is a constant worry of effective replacement of lawyers by AI and robots, considering that China has already deployed robots to disseminate legal services to people in areas where there are less number of human lawyers. IBM's cognitive computer Watson won the quiz show "Jeopardy" against human competitors in 2011¹⁶. This does pose a potential threat to lawyers across the globe.

3. AI is able to perform tasks like contract drafting, document review, prediction of litigation outcomes, contract analysis and other tasks that are usually performed by lawyers. The scare that lawyers will be effectively replaced by AI and be out of jobs is genuine, considering the fact that they lack proper awareness and knowledge about AI.

4. Potential bias of AI where predictive analysis is used can be caused due to the bias in AI that occurs due to the bias of the coder/ programmer at a sub-conscious level, which might disrupt the accuracy of outcome predictions thus meddling with legal procedures. This problem, however, might not exist in the future as AI advances day by day.

5. AI cannot be totally relied on by the legal system as it lacks skills and reasoning unlike human counsels. Going forward, considering the apparent dependency on AI by the legal system around the world, human lawyers must only use AI to 'assist' them and not depend on AI for procedures that require a human's reasoning, understanding of context, skills and emotional intelligence. AI must be utilized only for purposes that include excessive paperwork that do not require the above mentioned parameters and thereby assist lawyers by saving time.

WILL AI 'REPLACE' LAWYERS?

The answer is NO. AI or robots cannot replace lawyers. As stated above, AI must be utilized to assist a human being and not to replace one. Being a lawyer takes more than just performing tasks like contract review, drafting, analysis or any other sort of paper work. Being a lawyer takes being a person who has certain skillset including—

- A knack for sensible decision making
- Considering factors like morals—right and wrong, values, mindset of the society, sense of living
- Understanding attorney-client relationship

¹⁶ LEGAL TECH BLOG, *AI IN LAW: DEFINITION, CURRENT LIMITATIONS AND FUTURE POTENTIAL*; <https://legal-tech-blog.de/ai-in-law-definition-current-limitations-and-future-potential>

- Understanding duty to court
- Being reasonable in his actions and being responsible for them
- Having an emotional quotient along with intelligence quotient
- Exercising legal acumen and skills
- Understanding the right interpretation and application of the law, subject to contextual situations among others.

AI can talk to humans and interact with them based on the data they are instilled with. They cannot comprehend and perform tasks that require going beyond that data and the certain set of instructions.

CONCLUSION & RECOMMENDATIONS

We can therefore conclude that AI is here to make our lives easier and more convenient. Application of AI in all sectors across the globe is inevitable and we as lawyers must embrace this fact. However, here are a few steps that the legal community can adapt:

- 1) To get acquainted and updated with AI technologies, every law school, in India specifically, must include a mandatory subject on *Artificial Intelligence* to understand what it is, how it works and its interface with law.
- 2) Law firms and lawyers' offices must start using AI technologies at a greater scale to get acquainted with the practical usage of AI and avail its benefits. Courts must also encourage this and adapt this in court proceedings whenever necessary as well.
- 3) Law students, who are mostly well-equipped with technology, can spread awareness on AI which will limit the fear-mongering in lawyers' minds that AI can replace them.
- 4) Lawyers, by embracing AI technologies, can be more efficient by saving time.
- 5) This will also equip lawyers in taking up matters that deal with AI and internet fraud effectively.