

AI and the Law: A Journey through Evolution, Application, and the Challenges of Copyright



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Abstract: *This paper discusses the widespread adoption of Artificial Intelligence (AI) from the idea of fiction into the Halls of Justice. The main finding encompasses a comprehensive examination of AI's integration into the field of law by discussing its historical background and evolution, its evolutionary role in legal research, and its impact on transforming the adjudication process of Courts by considering some courts' practices in different states. This discourse offers a critique of the utilization of AI technology by adjudicators in the role of Amicus Curiae, highlighting the lack of adequate training. In examining the widely held belief that artificial intelligence (AI) brings societal advantages by positively affecting various aspects of daily life, this discussion also considered the current concerns related to copyright protection and its ownership.*

Is it possible to surmount the use of artificial intelligence in this fast-spreading wave? This research has examined the response by taking into account the legislations of the states, as well as its upsides and downsides in the law field. This research also recommends adequate training for professional and legal experts and emphasizes the responsibility of states to safeguard intellectual property rights.

Keywords: Artificial Intelligence and Legal Research, AI and decision making, AI and Copyright law, AI in Law

Introduction

In the world of fiction, there exists the impossible innovations and wonders that could not be achieved by a human in the real world. However, in today's era, humans have made the fictional world and real-world comparison more challenging by making the imagination into a real life. Humans came up with the new concept to create machines that would achieve our work much faster, more accurately, efficiently and professionally. Such minds or machines are known as Artificial Intelligence. Through innovative technological advancements like these, humans can unlock a whole new universe of opportunities and reshape how they view and interact with technology.

Artificial intelligence (AI) has emerged as a

prominent subject across various legal domains in the contemporary technological landscape. Firstly, it raises questions about the creation of works with the help of AI. Secondly, it raises a question about the copyright protection of AI itself. Nevertheless, rather than implementing comprehensive legislation for the protection of rights, individuals have increasingly turned to utilizing AI tools such as ChatGPT and various others. Some believe that AI is not "intelligent" in a legal sense; in other words, it cannot be compared to a human will. The utilization of artificial intelligence (AI) has engendered a fresh discourse across both the corporate and academic domains. It is worth mentioning that legal professionals, including judges, are also employing artificial intelligence (AI) tools, even within the context of court proceedings.

Instead of only delving into the legal aspects surrounding AI, this discussion also focuses on its historical context, its significance in legal study, and the advantages, disadvantages, and obstacles associated with its implementation. It explored the incorporation of AI in legal research and practice, courts and during courts proceeding. Moreover, it not only showed the enhancement of justice via AI's role, however, it also threatened the violation of due process, copyrights and other human rights, and recommended solutions for lacunas in this field.

2. History and Evolution

During the early 1900s, the media placed significant attention on artificial humans, which prompted scientists to investigate the feasibility of developing an artificial brain. A group of inventors developed rudimentary robots that were driven by steam and capable of both mimicking facial expressions and walking. Czech playwright Karel Čapek initially coined the term in his science fiction play "Rossum's Universal Robots," where he presented the concept of "artificial people" referred to as robots. The first Japanese robot, Gakutensoku, was constructed by Makoto Nishimura, a Japanese professor, in 1929. In 1949, computer scientist Edmund Callis Berkley released the publication "Giant Brains, or Machines that Think," in which he drew comparisons between contemporary computer models and the cognitive abilities of human brains.

In 1950, Isaac Asimov (Ralph E. Oesper, 1965), an American biochemist and author, played a crucial role in influencing the concept of artificial intelligence (AI) through his work. It was his insight into the field of robotics that led to the development of ethical guidelines for the behavior of robots and AI systems, which framed some boundaries to human relations with robots (Dauber, 2023). He gave three laws of Robotics:

1. "A robot may not injure a human being, or, through inaction, allow a human being to come to harm."
2. "A robot must obey the orders given it by human beings except where such orders would conflict with the First

Law."

3. "A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws."

During the same year, Alan Turing, a well-known computer scientist, received widespread recognition for the development of the very first Artificial Intelligence test, which is still utilized to this day. According to Turing's theory, a computer can be said to possess artificial intelligence if, under specific conditions, it can mimic human responses. The test evolved natural conversation between humans and machines. However, Turing tests have faced criticism throughout the years. Computers have always been constrained in the range of questions they can pose to exhibit human-like intelligence.

According to Harvard University's publication, Turing was impeded in his pursuit of creating a working model of artificial intelligence due to two major reasons. First, computer technology at that time was not sufficient to meet the necessary standards of intelligence and was limited in their ability to remember commands, secondly, due to the exorbitant expenses associated with computers during that particular period. History says at that time, computers had cost \$200,000 a month, limiting access only to elite educational institutions and big technology companies (Anyoha, 2017).

In 1956, Herbert Alexander Simon, Allen Newell, and John Clifford Shaw developed Logic Theorist, an artificial program. It has proficiency in problem-solving abilities within the realm of human mathematics, and it was even able to demonstrate the validity of mathematical theorems. For example, the type of notation employed in Russell and Whitehead's Principia Mathematica. Additionally, it was regarded as the inaugural artificial intelligence software and showcased during the Dartmouth Summer Research Project on Artificial Intelligence (DSRPAI), which John McCarthy and Marvin Minsky organized. History also says that it was not according to the expectations of John McCarthy; however, it opened the path of sentiment that AI was

achievable.

After that, between 1957 and 1974, machine learning algorithms improved, computers started storing more data, and became faster, cheaper, and easier to access. In 1970, Marvin Minsky, a prominent American computer scientist, expressed his thoughts to Life Magazine that within a span of three to eight years, a machine possessing a level of general intelligence comparable to that of an average human being would be developed. However, in the mid-1970s, the field of artificial intelligence experienced a significant decline in funding due to limited advancements made during that time. During the 1980s, the decline in the field was reversed by the implementation of advanced methodologies, including expert systems and neural networks. These techniques played a significant role in counteracting the downward trend (Tate, 2014).

In 1997, IBM, a well-known computer company, created IBM Deep Blue, a supercomputer that defeated the world's champion, Garry Kasparov, in a competitive match of chess. CNN has covered the 25-year back historical event, which was a significant breakthrough in the field of AI (CNN, 2022). Subsequently, the DARPA initiated the DARPA Grand Challenge in 2004. During the initial iteration, none of the vehicles managed to successfully finish the race, hence necessitating the resolution of substantial technological and engineering obstacles. In the subsequent year, the DARPA orchestrated the second iteration of the DARPA Grand Challenge, whereby the esteemed accolade of the victor was claimed by Stanley, an autonomous vehicle developed by Stanford University. Stanley's victory in the race demonstrated significant advancements in artificial intelligence, computer vision, and other important domains of autonomous vehicle technology.

In February 2010, a significant event saw the introduction of Watson, a computer system equipped with software known as Deep QA. The software was created by IBM Research and achieved triumph against two very accomplished human champions, Ken Jennings and Brad Rutter, during its appearance on the

widely recognized game show Jeopardy in 2011 (IBM, 2012).

The bullish candles of artificial intelligence did not stop there. Subsequently, Apple Inc. unveiled a groundbreaking functionality in the iPhone 4S known as Siri, which can be regarded as a virtual personal assistant. The SRI International Artificial Intelligence Center developed the software, and it has received a great deal of praise for its features, such as voice recognition and contextual knowledge of the user's information. In the year 2012, Google developed a neural network known as "Google Brain" with the purpose of identifying things seen in photographs. Remarkably, this neural network successfully identified cats within a vast collection of video files sourced from YouTube, comprising millions of entries (Markoff, 2012).

Moreover, in the year 2014, the developers of Eugene Goostman, an artificial intelligence chatbot that actively engaged in many Turing test competitions, asserted that the chatbot successfully prevailed in the Turing test competition by convincing the panel of judges. According to researchers, the bot managed to persuade a significant proportion of judges, specifically 33%, into believing that it possessed human-like qualities (Aamoth, 2014).

In the following year, an organization called OpenAI was established with an initial donation of one billion dollars from Elon Musk and other investors for the purpose of enhancing the potential of artificial intelligence. One of the first pre-trained language models was the Transformer language model, which was developed by Google in the year 2017 which led to the development of more advanced tools like GPT-1 in 2018. Having certain limitations associated with this model, the OpenAI introduced updated version in shape of GPT-2. However, the challenges of power and limitation were still in existence. Therefore, another version of GPT-3 and 3.5 were released, which caught the attention of the public in all fields. In 2023, the latest version of ChatGPT 4 was released which can deal with many features and instructions as compared to the previous models. According to Open AI, the last version of

ChatGPT is capable of processing up to 25,000 words at a time. This version is more creative and accurate than others (Haddad, 2023), and it has reduced the limitations of ChatGPT3.

This birth of AI has brought new opportunities and accelerated the traditional process, but also it brought complex challenges. Similar to other disciplines, individuals in the field of law have also begun utilizing artificial intelligence (AI) tools for both personal and professional reasons. AI generative tools have been subject to criticism regarding potential copyright infringement and concerns about the potential loss of creative human brains and the potential dominance of AI. Nevertheless, in the lack of established policies, a shift from traditional to intelligent systems has commenced within the legal domain.

3.1 Legal Research and Decision-Making Process

Legal research aims to address, develop, and improve the various flaws in the legal field, to find solutions to complex issues (Anon, 2022). In the pre-digital era, human lawyers manually understand the legal question, read all the relevant things, analyze the facts, and frame the legal issues (Blechner, 2023), which can be time-consuming and prone to errors. However, the era is now transformed, and digital technology like Artificial Intelligence has become prevalent in various aspects of legal research and decision-making process. Particularly, AI subsets like Machine learning and Natural Language Processing (NLP) have now enhanced the legal research by automating some of the processes and improving the accuracy and efficiency of results.

The databases, document review software, and chatbots that can provide answers to difficult legal questions are examples of artificial intelligence tools and have been used in legal research. For instance, ChatGPT and Ross Intelligence, which use natural language processing (NLP) to provide us with legal arguments in the same manner as a lawyer would. In a similar vein, the use of AI tools in the process of making decisions in the legal field involves the judicial determination of rights

through the interpretation and application of the law to particular cases. Additionally, a decision-making tool that utilizes artificial intelligence (AI) and is known as Lex Machina makes use of machine learning in order to analyze legal data and provide insights into patterns and trends.

In a nutshell, the incorporation of AI has brought fresh viewpoints in the field of legal research and within the adjudication process. It is a fact that human judges and practicing lawyers are well verse about the legal area, however, the edge cannot be achieved over others without fast, strong and efficient work within field, and these tools can be used in such way effectively.

3.2 AI Applications in Legal System

During the past few decades, several companies have developed advanced artificial intelligence technologies that help the legal experts to work more effectively, make lesser number of mistakes and improve their potential to make decisions. One of the different methods included was improving due diligence from a typical level to a more advanced level. The task was successfully accomplished by offering insightful directions on the numerous alternatives as well as proposing some suitable stages. There is a company named case text that assists legal professionals using artificial intelligence. The company provides legal assistance by using artificial intelligence in different tasks like research, contract analysis, document review, and preparation for depositions and that legal assistant is named Co-counsel. Many of the renowned law firms, including DLA Piper and Ogletree Deakins, have adopted the case text as their legal software, using it for their legal operations. Ross Intelligence has recently developed a legal research tool that works on artificial intelligence, on which legal stakeholders can ask questions and acquire relevant information such as recommended readings, relevant cases, and other additional resources. By integrating the machine learning algorithms, this tool can easily primarily easily analyze the legal data, and it improves its feedback while being used repeatedly. The bankruptcy department of the well-established law firm Baker Hostetler has implemented ROSS Intelligence to effectively organize and

analyze a vast amount of data, totaling 27 terabytes. Contract analytics is a method that converts legal content into a numerical format. As an additional service, platforms such as Legal Robot, which is headquartered in San Francisco, offer this service. The use of machine learning and artificial intelligence is employed in order to identify problems that are present within the document.

There is an abundance of other platforms of AI, such as LawGeex, Kira Systems, Leverton, eBrevia, JPMorgan, and ThoughtRiver, that are responsible for contract reviews, the extraction of pertinent textual data from legal contracts and other documents and providing of advanced analytical capabilities to legal professionals.

3.3 Machine learning, Expert System and Natural Language Processing

One subfield of artificial intelligence (AI) is known as machine learning, and it has the potential to provide assistance to legal professionals in their research by analyzing vast amounts of legal data. Legal principles can be extracted, relevant cases can be identified, and predictions can be made regarding the outcomes that could occur. In the same way that predictive analytics software has the ability to recognize and analyze patterns and trends within historical case law data, it also gives attorneys the ability to devise legal strategies that are more effective and efficient. For instance, a lawyer representing a client in a case involving patent infringement can use predictive analytics to estimate the likelihood of a favorable outcome from the judge based on previous cases that involved circumstances that were comparable to the current one (Kabir & Alam, 2023).

Those computer programs that counterfeit the mental abilities of human beings during the making of decisions are called expert systems. Legal stakeholders utilize them to help in the making of complex legal decisions by examining legal data and making recommendations based on established rules and knowledge bases. This is accomplished through the utilization of legal professionals. Decision Support Systems (DSS) are the leading expert systems that are used in the legal business which

helps the legal attorneys in identifying risk procedure, providing help in preparing alternate strategies, and examining the possible results of different legal approaches (Ibid).

Furthermore, natural language processing (NLP) is a sub-branch of artificial intelligence whose function is to aid in the comprehension, interpretation, and generation of human language. In the legal field, it is specifically beneficial for jobs such as analyzing documents, recognizing important ideas, and extracting information that is relevant to the circumstances. eDiscovery software uses this natural language processing (NLP) for finding out a large scale of legal documentations, including emails, contracts, and court transcripts. The system provides crucial assistance to legal professionals in trial preparation, evaluation of the merits of their cases, and finding evidence of their support (Ibid).

3.4 Transformation in Judicial Proceedings

In many courts and among judges, the use of digital technology has become increasingly widespread over the course of the previous decade. The documents of some organizations have been digitized, paperless electronic file systems have been implemented, and online dispute resolution (ODR) has been incorporated into their administrative procedures. The smart court' project has been initiated by both the British government and the Chinese government (Sourdin, 2021). A 'Remote Access Family Court' has been implemented in the Covid-19 by the Family and Family Division of the High Court in the United Kingdom in order to facilitate the implementation of a virtual dispute resolution system (Ibid). With the beginning of the year 2016, China started the process of installing a "Smart Court" system that makes use of artificial intelligence (AI). The system is constructed using machine learning (ML) technology, which performs continuous monitoring for instances of corruption and derives insights from 100,000 daily episodes. In order to make decisions, the system takes into account data from various governmental entities, legal authorities, and law enforcement

agencies. Judges are expected to adhere to the AI system's recommendations. If they deviate, they must present written reasons for their choices (Kadam, 2022).

Additionally, in 2023, an Additional District and Sessions Judge in Pakistan used ChatGPT in a case involving a bail. The judge asked 18 questions using ChatGPT, revealing its potential to improve judicial decisions. The judge suggested further research on the technology to develop a tailored approach for implementation in courts. In the Indian court case *Jaswinder Singh vs Jassi Vs State of Punjab*, artificial intelligence was used to analyze the jurisprudence on bail when assaulted with cruelty, as the judge used the ChatGPT to provide a global perspective. In Colombia, Judge Juan Manuel Padilla used ChatGPT to render a verdict in a legal case involving an autistic child. The judge supported the autistic child's case, stating that health insurance companies cannot refuse payment for medical expenses (Taylor, 2023). The widespread utilization of AI has garnered the attention of lawmakers, prompting the need for its regulation on both national and international levels.

3.5 Regulation of Artificial Intelligence

AI adoption in the legal field and judicial proceedings can be justified on the ground that using technology is part of our legal system. Using electronic and modern devices is permissible in the legal field and decision-making process. China has implemented numerous plans and regulations pertaining to Artificial Intelligence. For instance, the implementation of the Next Generation Artificial Intelligence Development Plan commenced on July 8, 2017. The Next Generation Artificial Intelligence Governance Principles were put into effect on June 17, 2019. The Next Generation Artificial Intelligence Code of Ethics took effect on September 25, 2021 (Lu, 2023). Lastly, the Interim Measures for the Management of Generative Artificial Intelligence Services were implemented on August 15, 2023 (McKenzie, 2023). In parallel, the European Union has also taken the first initiative for its regulation and bringing comprehensive AI Law. The European

Commission introduced the first regulatory framework for Artificial Intelligence (AI) in April 2021, which states that AI systems, which have versatile applications, are examined, and categorized based on the level of risk they present to users. After several debates, the Parliament and the Council reached a preliminary agreement on the AI Act on December 9, 2023. The mutually agreed text must now undergo formal adoption by both the Parliament and Council in order to be enacted as EU law (Europa, 2023).

However, in the absence of formal regulation, the excessive utilization of AI is under criticism. Experts like Prof. Juan David Gutierrez and Octavio Tejeiro stated that AI has raised moral concerns in the law field. Harvard Law School prohibits AI large language models in exams and academic work, stating it would be dishonest and leading to a one-semester sanction (School, 2023). And Australian educational institutions have reverted to traditional exams due to instances of students using AI for essay writing. The University of New South Wales spokesperson argues that this undermines academic integrity and poses a significant challenge for all educational and training institutions globally (Cassidy, 2023).

4. Issues of Copyright and Artificial Intelligence

States acknowledge copyright protection exclusively for works originated by individuals. However, the Constitution and Copyright Act of such states do not explicitly specify the eligibility criteria for being an "author." For instance, numerous courts have declined to confer copyright protection to non-human authors, contending that photographs taken by monkeys, books inspired by celestial beings, and gardens created without human authors are not eligible for copyright.

As artificial intelligence has become present in virtually every facet of a wide range of fields, the issue has become a topic of discussion. Computer scientist Stephen Thaler filed a lawsuit against the United States Copyright Office in June 2022. The lawsuit was filed after the Copyright Office rejected his application to

register a visual artwork that he claimed was created "autonomously" by an artificial intelligence program known as the Creativity Machine. Thaler claimed that the artwork was created by the Creativity Machine. He argued that the Copyright Act does not require human authorship to comply with its provisions. On the other hand, a federal district court ruled in favor of the Copyright Office, stating that human authorship is essential for valid copyright claims. This is due to the fact that only human authors require copyright incentives. The United States Copyright Office recognizes that only works created by human beings are eligible for registration as original works (Iskakova & S. Y, 2022). Also, in the legal case of *First Publication v Rural Telephone Service Company, Inc.* 499 US 340 (1991), it was explicitly stated that copyright protection is limited to intellectual creations that are the result of creative mental effort (WIPO, 2017). In 2012, during a legal proceeding of the case *Acohs Pty Ltd v Ucorp Pty Ltd*, an Australian court ruled that creative output resulting from the utilization of technology is not eligible for copyright protection on the grounds that it lacks human involvement (2017).

Due to the fact that they are comparable to things that were made by humans, it is a widely held belief that creations that were generated by artificial intelligence ought to be eligible for copyright protection. As an illustration, the Supreme Court of the United States decided in the case of *Burrow-Giles Lithographic Co. v. Sarony* that photographs can be protected by copyright law if the photographer demonstrates creative ability. Generative AI programs, such as cameras, can be regarded as novel instruments for safeguarding copyright. On the other hand, the Copyright Office and other organizations have stated that they do not have complete creative control over the manner in which AI systems interpret prompts and produce materials. They referred the AI users to patrons who engage artists, providing them with only broad instructions.

Furthermore, the United States Copyright Office recognizes that creations that incorporate content generated by artificial intelligence may

be eligible for copyright protection under specific conditions. These conditions include situations in which the creations involve human arrangements that are one of a kind or when they combine material that was generated by AI with material that was written by humans. When it comes to copyright registration, for instance, authors have the exclusive right to copyright protection for their contributions. However, they are required to acknowledge and exclude portions that were generated by artificial intelligence.

Even in Australia, the copyright protection of artificial intelligence has been a topic of contention, as the Australian Copyright Act 1968 (referred to as the "1968 Act") does not extend its protection to it. And, to comply with the Act, a work must possess the following characteristics: originality, authorship, expression in a tangible medium, and a connection to Australian jurisdiction. In the case of *IceTV Pty Limited v Nine Network Australia Pty Limited* HCA (22 April 2009), the court ruling established that for a work to be considered original, it must be created by the author and not merely copied from another source.

Regarding a view, Who Owns the Copyright to Generative AI Outputs? A view has started to gain traction in nations such as India, Ireland, New Zealand, and the United Kingdom, which recognize programmers as the rightful authors of such works. In English law, Section 9 of the Copyright, Industrial Designs, and Patents Act 1988 states that "in the case of creating a literary, dramatic, musical or artistic work using a computer, the author is the person who takes the measures necessary to create the work." Although the issue is still being debated, no clear rules have emerged identifying who will be the "author or authors" of such works. Let's suppose we compare the AI programmer with the Camera manufacturer and the AI user with the camera user who takes photos. Due to the fact that the camera user is the owner of the copyright in this scenario, the AI user would be considered the author, which means that they would be the initial owner of the copyright. Conversely, an individual who develops an AI

system could assert a greater degree of authorship compared to a company that produces cameras, owing to the creative choices involved in the process of coding and training the AI (T Zirpoli, 2023). Regardless of the issue of the initial ownership of an AI output, there should be a sort of contract via the terms and conditions where the copyright owner clause would solve the dispute up to some extent.

In short, AI seeks the attention of policymakers and legislative bodies to define and update their copyright laws. International bodies should dive deeper into this matter and work on this issue diligently before the copyright issue extends beyond the boundaries due to the originality of the works. It would be advantageous from a practical standpoint to acknowledge copyright in order to support future investments in the development of artificial intelligence technologies. However, from a theoretical standpoint, artificial intelligence does not necessitate copyrights. The system will autonomously generate content, irrespective of its copyright status. This content will only be generated upon receiving a program command initiated by a user. This approach pertains to the advancement of contemporary technology, and there exists a potential for artificial intelligence to achieve total autonomy in the future.

5. The Upsides of AI Integration in the Law Field

AI has now challenged human efforts; a 3-hour task for a human is just a matter of 30 seconds for an AI. Many countries have a well-developed legal framework where the incorporation of AI can further speed up their system and improve their ranking in the competition list. However, in least-developed countries, there exists the traditional way of handling the procedures in courts, a large number of daily cases, a low number of the judiciary, and a need for legal experts. If the LDC starts incorporating AI in its legal field, it will increase the pace of the legal system to solve problems in different capacities. It would also enhance the efficiency in the field by managing all the cases' routines and schedules and prioritizing the cases according to the facts and nature of the case. And, even during the courts' proceedings, the AI can serve

as an Amicus Curiae in order to help the judges access the relevant provisions of statutes, analyze the lawyers' arguments, and identify the lacunas in them. Even in Pakistan, the Peshawar High Court announced in 2022 that no candidate was able to clear the ADSJ posts' exam on the lawyer quota (Dawnn, 2022). That highlights the lack of competency in the law field and, hence, a smaller number of legal experts in the law field to address the legal issues in developing a better legal system. However, if AI is integrated into courts, then case motions, case filings, and court decisions will be easily accessible, and then we will find large volumes of data in a very short period. It would predict the outcome of legal disputes, check the authenticity of reports, and take experts' opinions at any time. It would reduce the use of paperwork, courts would be dependent on a smaller number of staff, and competition would become tough in legal fields. In legal drafting, the AI will draft cases more quickly, which would help the judges to write their judgments of the cases with more clarity and fairness in the translation and interpretation of legal terminologies. Contracts are integral to the legal profession; AI can assist in identifying the potential and crucial points within the legal agreement. It would be set up as "self-service" for clients in writing a deed for the contract. The system will automatically ask for the details according to the nature of the case and dispute, and after entering a few variables, it will produce a standard form agreement for the parties.

6. The Downside of Integrating AI in the Law Field

Artificial Intelligence (AI) provides the information according to the Algorithm it has been trained. However, the current AI tools are not completely based on legal knowledge or Algorithms. Interrogating contemporary AI tools often yields responses accompanied by spurious citations. It means that AI still needs modification to grow on the legal side because their answer without sources and authorities can cause disputes. For example, AI ChatGPT4 is better than chat GPT3.5, and chat GPT 3.5 is better than chat GPT3; it signifies that current AI tools are inadequate, and their knowledge is derived from limited sources. Thus, there must

be perfect tools in the legal field; otherwise, using AI tools may lead to injustice. It is evident that the legal Fraternity is reluctant to adopt the technology, and most of them need more technical expertise. Therefore, before adopting AI in every area of the field, legal and ethical considerations must need to be taken into account. Otherwise, there are chances of biases and discrimination in AI algorithms, which may cause fear in the legal profession, and people will lose faith in justice and fairness.

Furthermore, the integration of AI technology will hinder law experts from generating new jurisprudence due to the inherent variability in the nature of cases across different locations and individuals. In common law countries, the utilization of AI tools by lower courts may result in judges' precedents becoming legally binding. The Pakistani Judge, ADJ Muhammad Amir Munir, posed 18 inquiries to an AI tool. These two questions are included in his judgments. "In what ways can you assist a judge in the professional decision-making process?" and "You are quite smart in correction. I am impressed." That underscores the fact that AI would create a reliance on it among legal professionals, thereby diminishing their cognitive and analytical abilities. By depending on AI, legal experts will diminish their ability to generate and advance new legal principles, and this reliance will prevent human minds from challenging AI-generated responses.

7. Embracing the Future and Overcoming Challenges in Incorporating AI

Ignorance of AI in the current era shouldn't be an excuse because AI has now taken up almost every field like the birth of the Internet. Expert suggests that ignorance of AI is like ignoring the internet. In the past, traditionalists encountered challenges when attempting to utilize the Internet for their projects. However, with time, they grew accustomed to it and are now quite familiar with it; in this rapidly evolving world, those who lack proficiency in internet navigation are deemed to be behind the competition. At that time, the use of the internet could not have posed a threat to the populace. However, AI tools that minimize human effort

and reduce time, storage, and cost may occasionally pose a threat. This threat may manifest in diverse forms across all domains; nevertheless, within the realm of law, it would infringe upon the right to a fair trial. In order to prevent this injustice, law experts, similar to professionals in other disciplines, ought to receive adequate training through seminars, webinars, workshops, and evaluations. They should educate everyone on the advantages and disadvantages of utilizing AI such as ChatGPT, and we should not rely on AI; rather, it should serve as a supplement to human labor rather than a substitute for it. Nonetheless, law professionals must employ AI intelligently in order to avoid falling behind in the AI era. That would effectively mitigate the risk to human ingenuity, jurisprudence, operational effectiveness, and the investigative procedure within the realm of law.

It is of the utmost importance to make certain that all members of the judicial system, including the judges, receive the appropriate amount of expertise. Due to the fact that AI tools have demonstrated their capacity to assist us in resolving complex legal matters that have traditionally required manual and online research methods, it is not likely that AI work will render manual and online research obsolete. In addition, artificial intelligence frequently generates citations and references that are not only inaccurate but also misleading. The result of this is the production of reference links that are not authentic. It is possible that an excessive amount of artificial intelligence would lead to the production of a significant amount of content that is both false and misleading.

The above discussions resulted in recommending a proper guideline of using AI for the adjudicators and practitioners. The AI, which is made by countries like US, China, and UK, and if we adopt it without understanding our legal, moral and cultural values, it will not lead us towards a sustainability, but our system will collapse. Therefore, the development of proper guideline and bring legislation regarding using AI should be a current need of every state.

Conclusion

Artificial intelligence (AI) is now said to be a deputy of humans. Its uses in all fields including the law have started improving the decreasing human error rate, time, and workload. Also, its role in fast documentation, suggesting laws, and interpreting them helps to increase efficiency. However, it is also evident that the role of AI in the legal field may lead to bias, discrimination, opaqueness, and inequality. AI is a subject of interpretation of the law. The issues of algorithm transparency and copyrights are still in debate. The judge's reliance on AI tools during court proceedings can lead to a lack of due process and may violate individuals' fair trial rights. Even though prohibiting AI from public use and restricting its functions in law field is not appreciated and cannot be achieved. Therefore, the states and world organizations should play an effective role in bringing conventions, developing domestic laws, and organizing workshops and conferences for the protection of individual rights. So let AI be a boon and not a burden.

References

- Anyoha, R. (2017, August 28). *The History of Artificial Intelligence*. Science in the News. <https://sitn.hms.harvard.edu/flash/2017/history-artificial-intelligence>
- Aamoth, D. (2014, June 9). *Interview with Eugene Goostman, the Fake Kid Who Passed the Turing Test*. Time; Time. <https://time.com/2847900/eugene-goostman-turing-test/>
- Blechner, A. J. (2023). *Research Guides: Legal Research Strategy: Legal Research Strategy*. Guides.library.harvard.edu. <https://guides.library.harvard.edu/law/researchstrategy#s-lg-page-section-2497253>
- Cli Mckenzie, B. (2023). https://insightplus.bakermckenzie.com/bm/attachment_dw.action?attkey=FRbANucS95NMLRN47z%2BeeOgEFct8EGQJsWJiCH2WAWuU9AaVDeFglGa5oQkOMGI&nav=FRbANEucS95NMLRN47z%2BeeOgEFct8EGQbuwypnpZjc4%3D&attdocparam=pB7HEsg%2FZ312Bk8OluiOIH1c%2BY4beLEAezirm3%2BK7wMU%3D&fromContentView=1
- Cassidy, C. (2023, January 10). *Australian universities to return to "pen and paper" exams after students caught using AI to write essays*. The Guardian. <https://www.theguardian.com/australia-news/2023/jan/10/universities-to-return-to-pen-and-paper-exams-after-students-caught-using-ai-to-write-essays>
- European Parliament. (2023, August 6). *EU AI Act: First Regulation on Artificial Intelligence*. Ww.europol.europa.eu. <https://www.europol.europa.eu/news/en/headlines/society/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence>
- Haddad, M. (2023, March 15). *How does GPT-4 work and how can you start using it in ChatGPT?* Ww.aljazeera.com. <https://www.aljazeera.com/news/2023/3/15/how-do-ai-models-like-gpt-4-work-and-how-can-you-start-using-it>
- IBM. (2012, March 7). *IBM100 - A Computer Called Watson*. Ibm.com; IBM Corporation. <https://www.ibm.com/ibm/history/ibm100/us/en/icons/watson/>
- In 1997, an IBM computer beat a chess world champion for the first time - CNN Video. (2022). Edition.cnn.com. <https://edition.cnn.com/videos/business/2022/05/11/ibm-deep-blue-computer-beats-garry-kasparov-chess-champion-1997-vault-jg-orig.cnn>
- Jaswinder Singh vs Jassi Vs State of Punjab, (HIGH COURT OF PUNJAB AND HARYANA).
- Taylor, L. (2023, February 3). *Colombian judge says he used ChatGPT in ruling*. The Guardian. <https://www.theguardian.com/technology/2023/feb/03/colombia-judge-chatgpt-ruling#:~:text=A%20judge%20in%20Colombia%20has>

- Kadam, T. (2022, July 16). *China's AI-Enabled "Smart Courts" To Recommend Laws & Draft Legal Docs; Judges To Take Consult AI Before Verdict*. Latest Asian, Middle-East, EurAsian, Indian News. <https://eurasianimes.com/chinas-ai-enabled-smart-court-to-recommend-laws-judges>
- Kabir, M. S., & Alam, M. N. (2023). The Role of AI Technology for Legal Research and Decision Making [Review of *The Role of AI Technology for Legal Research and Decision Making*]. *International Research Journal of Engineering and Technology (IRJET)*, 10(07). <https://www.irjet.net/archives/V10/I7/IRJET-V10I7148.pdf>
- Legal Research Basics: A Step-By-Step Guide to Brushing Up on Your Skills*. (n.d.). Wwww.lexisnexis.com. <https://www.lexisnexis.com/community/insights/legal/b/product-features/posts/an-introduction-to-legal-research#:~:text=What%20is%20the%20Importance%20of>
- Lu, A. R. K. (Zhao S. L. F. (n.d.). *China's first generative AI regulation unveiled: Are there positive signals for the emerging technology under global scrutiny?* Passle. <https://techinsights.linklaters.com/post/102iji5/chinas-first-generative-ai-regulation-unveiled-are-there-positive-signals-for-t>
- Markoff, J. (2012, June 25). How Many Computers to Identify a Cat? 16,000. *The New York Times*. <https://www.nytimes.com/2012/06/26/technology/in-a-big-network-of-computers-evidence-of-machine-learning.html>
- Oesper, R. E. (1965). Biographical encyclopedia of science and technology (Asimov, Isaac). *Journal of Chemical Education*, 42(7), 401. <https://doi.org/10.1021/ed042p401.2>
- Report, B. (2022, September 4). *Lawyers reject failure of all candidates in ADSJ exam, call it "conspiracy."* DAWN.COM. <https://www.dawn.com/news/1708283>
- Sameera Zulfikar W/O Zulfikar Ahmad vs. AM (a Juvenile), (Addl. District & Sessions Judge 2023).
- Sourdin, T. (2021). *Judges, Technology and Artificial Intelligence: The Artificial Judge*. In *Google Books*. Edward Elgar Publishing. https://books.google.com.pk/books?id=c_dEtEAAAQBAJ&lpg=PR1&ots=HT5SGor9Pu&lr&pg=PA1#v=onepage&q&f=false
- School, H. L. (2023). *Statement on Use of AI Large Language Models* [Review of *Statement on Use of AI Large Language Models*]. <https://hls.harvard.edu/statement-on-use-of-ai-large-language-models/>
- Tate, K. (2014, August 25). *History of A.I.: Artificial Intelligence (Infographic)*. Livescience.com; Live Science. <https://www.livescience.com/47544-history-of-a-i-artificial-intelligence-infographic.html>
- T. Zirpoli, C. (2023). *Generative Artificial Intelligence and Copyright Law* [Review of *Generative Artificial Intelligence and Copyright Law*]. *Congressional Research Service*. <https://crsreports.congress.gov/product/pdf/LSB/LSB10922>
- Iskakova, J. T., & Kashkin, S. Y. (2020). Modern copyright law and the problems of artificial intelligence development. *Courier of Kutafin Moscow State Law University*, 2, 43–52. <https://doi.org/10.17803/2311-5998.2020.66.2.043-052>
- WIPO. (2017). *The Future of Intellectual Property: Opportunities and Challenges*
- What Isaac Asimov Can Teach Us About AI. (2023). In *theatlantic.com*. <https://www.theatlantic.com/books/archive/2023/03/ai-robot-novels-isaac-asimov-microsoft-chatbot/673265/>