

In the era of artificial intelligence, the feasibility analysis of AI and judicial coupling empowerment

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Abstract: The rapid rise of artificial intelligence is empowering judicial activities, the technological revolution has spawned a new form of judicial business, under this development trend, the comprehensive development of artificial intelligence is inseparable from legal protection. The research on the model of AI and judicial coupling empowerment lays a solid foundation for the development of a win-win situation for both. First of all, AI and justice have the feasibility of coupling empowerment under the requirements of the development of The Times, so the integration and interaction of the two becomes inevitable. Secondly, the practical problem of the integration of artificial intelligence and justice is that the independence, experience and judicial gravitas of judges will be severely challenged, the judgment of “robot judges” is difficult to be recognized by the public, and there is an inherent tension between the technical logic of algorithms and the moral reasoning and value judgment of judicial decisions. Therefore, this paper will clarify the theoretical red line of AI+ in judicial application on the basis of Further explore the mode choice of the two coupling enablement.

Key words: artificial intelligence; AI+; Judicial practice; Coupling enabling;

Introduction: Since the 18th National Congress, the application of artificial intelligence in the judicial field has been widely discussed. The government has put forward the strategy of “Internet plus legal services”, aiming to promote the deep integration of information technology and legal services and improve judicial fairness, efficiency and convenience. With the continuous development of AI technology, judicial institutions such as courts, procuratorates and law firms at all levels have begun to try to use AI technology to improve the efficiency of judicial work. For example, some courts and procuratorates use artificial intelligence algorithms to predict and evaluate cases and assist in sentencing and sentencing; Some law firms are using natural language processing technology and machine learning algorithms to improve the efficiency of document writing and searching. At the same time, the use of this technology has raised some concerns and concerns, such as whether it will negatively affect human intelligence and judgment. Could it lead to unfair decisions made by machines? How can data security and privacy rights be guaranteed? Therefore, when promoting the application of AI technology and the judicial field, it is necessary to balance the relationship between scientific and technological progress and the rule of law, avoid the abuse and misuse of AI technology, and ensure judicial justice and the protection of people’s rights and interests.

I. The motivation of the coupling of artificial intelligence and justice

1. Macro-comprehensive development motivation

With the emergence of ChatGPT4, the craze of artificial intelligence technology is rising again, and AI+ legal research is unprecedentedly flourishing. However, whether AI+ judicial application can be fully applied to all aspects of legal trial and whether all types of litigation can be fully included has not been confirmed by people. Legal research should get out of the cargo worship of AI and rationally couple AI with justice. And give full play to the empowering effect between artificial intelligence and justice.

Promote the deep integration of artificial intelligence and judicial work, comprehensively deepen the construction of smart courts, adhere to the main line of justice for the people and justice, accelerate the deep integration of artificial intelligence technology with trial execution, litigation services, judicial management and other work, further standardize the application of judicial artificial intelligence technology, and improve the effectiveness of judicial application of artificial intelligence. To promote the modernization of the judicial system and judicial capacity, and to provide powerful judicial services for comprehensively building a modern socialist country and comprehensively promoting the great rejuvenation of the Chinese nation. According to the needs of judicial artificial intelligence for computing power, communication and service capabilities, scientific and reasonable planning and construction of information infrastructure such as communication networks, computing and storage, general terminal equipment and special information facilities, constantly strengthen network security, data security and personal information protection capabilities, improve the operation and maintenance mechanism of artificial intelligence, So as to better guarantee the application of artificial intelligence in the judicial system.

2. Micro win-win development motivation

In recent years, the Chinese government has made a lot of progress in promoting the construction of the rule of law, while also making a lot of investment and research and development in the field of artificial intelligence. In terms of the relationship between these two aspects, the Chinese government has proposed the goal of combining “rule of law” and “cyber power”, and strives to regulate and guide the development and application of artificial intelligence technology through laws. The Chinese government strives to strengthen the supervision and management of AI technology, protect the privacy and human rights of citizens, and prevent the abuse or misuse of AI technology. At the same time, the Chinese government is actively promoting the innovation and application of AI and fostering the AI industry to promote scientific and technological innovation and economic development.

II. The mode choice of AI and judicial coupling empowerment

1. Clarify the theoretical red lines of AI+ in judicial applications

First, the application of AI in the judicial field can help improve judicial efficiency and fairness. For example, the use of natural language processing technology to automate the generation of documents, case information extraction and analysis can greatly reduce manual operation time and reduce the influence of human factors on judicial decision-making. In addition, AI is also improving the efficiency of “legal retrieval”. In China, as a country of civil law system, the significance of legal articles is more important than that of Anglo-American law system countries, so accurate and efficient legal retrieval is related to the success or failure of litigation results. PowerLaw AI is a pioneer in the field of AI and law, and its “search law search” search tool aims to improve the efficiency of the legal service industry. Sogou Lawyers released the “legal AI Consultation” function, which is actually a law-related chatbot tool that talks with users to obtain keyword information, so as to provide services such as case analysis, processing reference suggestions and recommending relevant lawyers. To sum up, AI is rising strongly to enable the development of law, new technology may give birth to a new form of judicial trial, and at the same time, the law also reverses the rational path of the development of the field of “AI+ justice”. The research on the coupling empowerment of AI and justice lays a solid foundation for the development of a win-win situation between the two. From the perspective of judicial judgment, to explore the application of artificial intelligence in judicial practice, the advantages and disadvantages of intelligent courts, whether artificial intelligence can be fully applied to judicial practice, accompanied by the research of artificial intelligence technology, whether judges can be replaced by intelligence, etc., are our next research issues.

In the process of research, we found that 80% of people think that artificial intelligence can not replace the judge to deal with cases. First of all, we believe that law is an extremely complex subject, which not only requires an in-depth understanding of various legal texts, cases and legal procedures, but also involves human factors such as integrity, fairness and humanity. Although artificial intelligence can mine and analyze data to some extent, it still requires the professional knowledge and experience of lawyers to interpret legal rules and apply them to judicial practice. These skills cannot be replaced by artificial intelligence.

In addition, the application of laws also needs to take into account cultural, historical, social and moral factors, the influence and changes of which need to be understood and dealt with by human beings. In addition, the most important point is that many people who distrust the existing judicial system believe that artificial intelligence technology will be absolutely fair, but artificial intelligence is essentially a series of probability changes caused by data, and can only be the product of human intelligence, so it cannot replace the human brain to think and make decisions, nor can it make accurate, legal and reasonable judgments. If the matters related to the interests of the parties are completely dependent on information technology to deal with, it is possible that the privacy of the parties will be leaked out, resulting in more serious injustice.

2. Existing problems in the application of AI+ in judicial adjudication

We are in the era of artificial intelligence, and in the future, 70% to 80% of jobs will be gradually replaced by artificial intelligence. We have seen some information from the media that the functions of judges in judicial trials are also likely to be replaced by artificial intelligence, but we do not agree with this argument. The reasons are as follows:

Firstly, it is not in line with human ethics and jurisprudence for artificial intelligence to determine whether human beings are guilty or not and how much punishment human beings should bear accordingly. The power of a judge belongs to the judicial power, and a judge exercises judicial power independently on the basis of facts and the criterion of law, without interference from any person or institution. Artificial intelligence, on the other hand, is an intelligent machine designed by human beings, which works according to the procedures set by human beings. To entrust the work of judges to artificial intelligence is to put human beings under the jurisdiction of artificial intelligence, which is not in line with human ethics and jurisprudence.

Second, even if artificial intelligence can quickly find out the relevant legal provisions, it cannot replace the judge to make a comprehensive judgment and make an intelligent decision in line with law and reason. By virtue of its own advantages, artificial intelligence can find out relevant legal provisions and judicial interpretations faster than human judges. However, in specific cases, many laws and judicial interpretations are often applied to one case. Therefore, which laws or judicial interpretations should be used in a specific case is a very complex issue, which requires the judge to thoroughly consider various situations and reach a wise judgment. Some difficult cases often form several different decisions, which need the collegial panel and the judicial committee to finally discuss and decide.

Third, the real society is complicated, legislation and legislative interpretation and judicial interpretation are still many can not cover the situation, and the specific case is colorful, in this case, artificial intelligence can not find the matching law and interpretation, so can not make a case judgment.

III. In the era of artificial intelligence, suggestions on the coupling of AI and judicial empowerment

1. Explore the potential needs of judicial AI on the basis of theoretical red lines

In the judicial application process, some fields have well applied AI to judicial links, such as the real-time and accurate generation of court records, and the more convenient way of publishing judgment documents. However, in other more and deeper potential needs, such as source management through judicial big data to solve the dilemma of the case sea, building a fair and fine performance evaluation system in trial management to improve judicial productivity, artificial intelligence is not well involved, which to some extent objectively reflects the judicial way of thinking about AI+ legal technology and the realization path is still relatively unfamiliar. The potential needs of the judiciary

for AI should be deeply explored in practice.

Strengthen the subdivision of judicial scenes, eliminate invalid needs, explore potential needs, refine scene needs, and further clarify the convergence points and specific intervention ways of artificial intelligence in different judicial scenes. Strengthen the coordination between the information function departments of courts at all levels and the trial departments and executive departments, give full play to the judicial staff's various role functions such as "AI+ judicial model approver" and "AI+ judicial function examiner", and put forward suggestions and measures for improvement of relevant intelligent products. It is necessary to continue to strengthen the construction of judicial data informatization, deepen the breadth and intensity of judicial information disclosure, integrate various platform construction and case resources, strengthen the reasoning of judgment documents, explore the system of reasonable disclosure of collegial opinions, and create favorable conditions for the formation of high-quality judicial big data.

2. Under the requirements of the construction of the rule of law, strengthen the judicial legal regulation of AI

After clarifying the potential demand for AI in judicial application scenarios, laws should be used to regulate the various detailed applications of AI+ to prevent the abuse of artificial intelligence in the judiciary and cause miscarriages of justice

The social phenomenon of uneven judgment. The key to taking legal norms as the underlying structure of judicial artificial intelligence is to ensure the autonomy of judicial subjects such as judges and prosecutors. If the restriction of artificial intelligence is internalized, then external intervention is needed to supervise, especially the picket of sensitive variables, and the dynamic balance between data protection and technological innovation can be achieved by intervening in the supervision of the rule of law.

China is not a country of case law, and judgment documents are not one of the sources of law in our country. Even the guiding cases regularly issued by the Supreme Law are only references in the judicial process, which is different from the decisive role of case law countries. According to the above, a judgment of the Chinese court is composed of legal norms, reasonable factors, legal principles, judges' independent discretion and other factors, and the core driving force of the rapid development of artificial intelligence lies in the algorithm. Therefore, the majority of legal regulation artificial intelligence should be concentrated in the algorithm area, and legal regulation and moral standards should be embedded in the artificial intelligence algorithm. The evaluation criteria of "AI+ justice" will be nailed to the target of good and good on the basis of abiding by law. And in the programming of AI algorithms, every detail should be regulated by law to prevent the phenomenon of "one size fits all".

References

- [1] Kai Zhu. Copyright Law Protection of Artificial Intelligence Products [J]. Yantai University,2019.
- [2] Lijia Gao. Research on the Legal Issues of the Application of Artificial Intelligence in China's judicial Practice [D]. Hebei University of Economics and Business,2022.
- [3] Yanhong Liu. Anti-intellectualization Criticism of Artificial Intelligence Legal Research [J]. Oriental Law,2019(05):119-126.
- [4] Haojie Fu. Research on the Application of Artificial Intelligence in Judicial Adjudication [D] Zhengzhou University.2022.

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