

Topic: Human Right Issues of Artificial Intelligence (AI) Gaps and Challenges, and Affected Future Legal Development in Various Countries

Implementation of Artificial Intelligence in Law Enforcement in Indonesia

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Abstract. *AI helps automate routine tasks, detect fraudulent activities, and provides valuable insights for risk assessment in the banking industry. Meanwhile, in the health sector, AI helps in early disease detection, treatment planning, and telemedicine, thereby facilitating health services. The approach method in this research is to use a normative juridical approach, namely a process for finding legal rules, legal principles and legal doctrines in order to answer the legal issues being faced. Data sources are obtained from statutory regulations, journals, papers, and others. The research results show that AI as a tool or device in law enforcement is more appropriate for assisting law enforcement regarding administrative techniques, prevention efforts, and finding perpetrators of criminal acts. AI cannot replace determining justice or policy, because AI does not have feelings, intention and conscience. In facing an era of rapid development of Artificial Intelligence (AI) Technology, the legal challenges that arise require a wise and holistic response.*

Keywords: *Artificial; Education; Enforcement; Intelligence; Law.*

1. Introduction

Current technological developments make it possible to use Artificial Intelligence (AI) in every area of human life, such as banking, health, even in the legal sector. French Tech Indonesia said, AI helps automate routine tasks, detect fraudulent activities, and provide valuable insights for risk assessment in the banking industry. Meanwhile, in the health sector, AI helps in early disease detection, treatment planning, and telemedicine, thereby facilitating health services. A concrete example of the application of AI technology in the field of law enforcement,

Implementation of Artificial Intelligence ...
(Yusian Eri Fitria, Sri Endah Wahyuningsih & Jawade Hafidz)

Topic: Human Right Issues of Artificial Intelligence (AI) Gaps and Challenges, and Affected Future Legal Development in Various Countries

especially in the traffic sector, is the use of electronic ticketing (e-tilang), where e-ticketing is an electronic system. monitoring and enforcing traffic laws in electronic form which utilizes CCTV supporting tools and replaces the manual ticketing system which uses blanks/ticket letters. Some groups hope that AI can play a role in making decisions regarding law enforcement in Indonesia, this is because AI can process legal documents, carry out risk analysis, search for information, make decisions, case management and prevent fraud. This research seeks to carefully explore and analyze the complexity of legal challenges that arise along with the development of artificial intelligence technology. 1Artificial intelligence aims to understand that artificial intelligence technology not only creates tools and systems capable of performing tasks previously performed by humans, but also enters domains that carry deep legal implications. With its ability to process and analyze massive amounts of data, the legal questions that arise include individual privacy, system security, legal liability, and more.

Furthermore, we will explore issues such as data ownership, intellectual property rights, and the impact of regulation on innovation in this field. This research also aims to provide practical insights and policy recommendations that can form adaptive and balanced regulations. With a deep understanding of these legal challenges, it is hoped that we can build a regulatory foundation that is able to accommodate the development of artificial intelligence technology without sacrificing human values, ethics and justice.

In this context, this research is an important contribution in guiding the direction of development. However, this of course requires further study regarding the use of AI in law enforcement. This article examines the role of AI in law enforcement in Indonesia. It is hoped that this article will be useful and provide recommendations for policy makers in using AI as a law enforcement tool in Indonesia. The development of artificial intelligence (AI) technology has led the world into a new era full of extraordinary progress and limitless innovation potential. Artificial intelligence has surpassed the limitations of conventional technology and changed the way we work, interact and access information. However, behind the light of this progress, lies the shadow of legal complexity that colors the journey of AI evolution. As AI develops rapidly, legal challenges arise that require in- depth reflection and adjustments to existing regulatory frameworks. This challenge is not only technical, but includes dimensions of artificial intelligence technology that are aligned with societal needs and legal principles.

With the existence of AI in technological development, of course this cannot be separated from the legal regulations that apply in a country. By looking at the technological advances possessed by AI which can carry out human work, of course this can give rise to several legal problems related to the actions and/or deeds it carries out. Where AI is an artificial intelligence

Implementation of Artificial Intelligence ...
(Yusian Eri Fitria, Sri Endah Wahyuningsih & Jawade Hafidz)

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that is limited by the code that underlies its ability to perform actions. In Indonesia there are no regulations that specifically and clearly regulate AI and of course this will be a legal problem in the future if AI technology carries out legal actions that are contrary to the positive legal provisions that apply in Indonesia. In this case, AI is seen from its ability to carry out actions and deeds, so it is no exception that AI can carry out legal actions like humans, for example committing a criminal act that harms another party. If you look at several countries that have used AI technology in various fields, of course some of these countries have positioned AI as a legal subject that has rights and obligations, but this does not apply in Indonesia because AI is not a legal subject according to positive law in Indonesia, therefore in this case, it is related to responsibility for actions and legal acts carried out by AI that need to be explained in this research, especially from a criminal law perspective.

Based on the description above, the problem formulation that can be made includes:

1. How is AI implemented in Law Enforcement?
2. How will AI impact legal education?

2. Research Methods

The approach method in this research is to use a normative juridical approach, namely a process for finding legal rules, legal principles and legal doctrines in order to answer the legal issues being faced. ²This research uses a qualitative approach to investigate these challenges holistically. Through a comprehensive literature study, analysis of legal literature, and interviews with experts, we try to detail the complexity of the relationship between artificial intelligence technology and related legal aspects. The tradition of research using mass media reports, especially newspapers and the internet, has grown rapidly over the last few decades, especially in the field of collective action and social movement studies.

3. Results and Discussion

3.1. AI Implementation in Law Enforcement

Artificial Intelligence (AI) or what is usually called artificial intelligence is a system that is programmed to think and behave like humans. Artificial Intelligence is a technology whose development is very significant. There are many things that AI technology can do even in the legal field. Application of AI technology in the legal field, for example contract drafting. The basic concept of artificial intelligence was first initiated by Warren McCulloch and Water Pitts through their paper entitled A Logical Calculus of Ideas Immanent in Nervous Activity in 1943.

Implementation of Artificial Intelligence ...
(Yusian Eri Fitria, Sri Endah Wahyuningsih & Jawade Hafidz)

Topic: Human Right Issues of Artificial Intelligence (AI) Gaps and Challenges, and Affected Future Legal Development in Various Countries

In this paper, there are three main topics, including: psychological science and the function of the brain's nerves, formal analysis of propositional logic, and Turing's theory of computation. They proposed how neural networks are able to become active when given a stimulus. This neural network can learn and adapt by giving different reactions depending on the time the stimulus is given.

First, legal due diligence reviews (LDD), namely legal examination or research activities carried out by advocates on a company to obtain facts or objective data that can describe the condition of a company, its assets and legal relationships. Basically, artificial intelligence is equipped with big data and machine learning capabilities. The capability can identify documents that have been uploaded to it automatically generating a risk analysis of those documents in 20 to 60 percent less time than manual review by an experienced advocate.

Second, the activity of preparing a contract requires many things that need to be prepared, namely the ability to draft a contract. One of them is being able to make requirements and obligations in good legal language. The artificial intelligence used in contract drafting is fast-track drafting and contract provided by "thomsonreuters.com". Fast track drafting and contracts can prepare contract documents and arrange them according to the parameters desired by a company.

Third, contract management/archiving is tiring work when done manually, whether it is contracts that need to be renewed, which contracts need to be terminated, or sorting contracts based on the number of transaction objects. However, artificial intelligence can do this without the need for excessive human influence. The software used in this activity is "two birds contract risk assessment". In general, the process is almost the same as other artificial intelligence functions in preparing contracts.

Fourth, legal research is the basis for drafting contracts. However, advocates often need a long time to do this with limited resources, even if they come from the internet.

Meanwhile, artificial intelligence can carry out legal research in various languages and is able to sort everything from statutory regulations, legal cases, to resolutions. In fact, artificial intelligence makes it possible to provide logical predictions of judges' decisions based on existing data. The use of artificial intelligence in the legal sector has penetrated the field of contract law. A contract is a legal relationship between two or more parties based on an agreement to give rise to legal consequences in the form of rights and obligations that must be fulfilled by the parties involved. Artificial intelligence in the legal sector is known as legal tech. This technology creates various innovation possibilities to provide lower cost and more

Implementation of Artificial Intelligence ...
(Yusian Eri Fitria, Sri Endah Wahyuningsih & Jawade Hafidz)

Topic: Human Right Issues of Artificial Intelligence (AI) Gaps and Challenges, and Affected Future Legal Development in Various Countries

efficient legal services. The use of legal technology that is currently being developed by many countries in the world in relation to contracts is the use of artificial intelligence to make it easier for contract designers to design, review and analyze contracts. Artificial intelligence is here to help various human jobs in the legal sector so that the work of professionals working in this sector can be done more efficiently, both in terms of time, energy and costs. Artificial intelligence in the legal sector is known as legal tech. One of the uses of legal technology is to make it easier for contract drafters to design, review and analyze contracts (smart contracts).

The smart contract feature is one of the various forms of convenience in the legal sector, especially in the field of contract design, which legal tech is now able to provide. This smart contract feature has the ability to act as a contract generator system to create a complete contract design along with legal analysis of the contract. This feature offers accuracy in correct and standard forms of contracts, correct legal language or diction, and balance between the parties regarding the regulated substance. Legaltech can be classified into three types, each according to the type of service. First, it is known as enabler technologies or technology designed to help process legal documents in digital form. Examples of this technology can be seen with the emergence of cloud storage and cybersecurity services. Second, it is known as support process solutions as a service specifically designed to streamline the managerial work of a law office, such as managing the Human Resource and Development (HRD) division, Business Development, and managing office administration and finances. In terms of terminology, artificial intelligence is defined as a machine that is capable of doing various things like humans when using their intelligence. Artificial intelligence is designed to describe the quality of human life, such as work planning, problem solving, reasoning, recognition of ideas, stimulating thinking abilities, and various other activities that can encourage fast and efficient work. According to Soerjono Soekanto, law enforcement can be influenced by legal factors, law enforcement, means or facilities, society and culture. Legal factors are laws and regulations that regulate certain issues. Regarding information technology, the ITE Law is a legal product that regulates electronic transactions and those related to cyberspace. Law enforcement

factors, namely police, prosecutors, judges who have integrity and capability in dealing with problems related to legal acts, for example those related to cyberspace or what can be called the cyber world. Community factors, which are related to community needs for regulation and law enforcement for actions related to cyberspace. Cultural factors are related to the culture of society in influencing a law. The facilities and infrastructure factor is related to the tools or equipment used to support the implementation of law enforcement. This factor is the most important factor in implementing law enforcement related to AI. AI is a device or tool that can help law enforcement in carrying out law enforcement. An example of what has been

Implementation of Artificial Intelligence ...
(Yusian Eri Fitria, Sri Endah Wahyuningsih & Jawade Hafidz)

Topic: Human Right Issues of Artificial Intelligence (AI) Gaps and Challenges, and Affected Future Legal Development in Various Countries

successful in law enforcement using AI is the implementation of e-tickets, where e-tickets prevent the occurrence of other criminal acts such as bribery to a law enforcer. Please note that law enforcement carried out by a device or tool will be treated differently from law enforcement carried out by a human. Riki Perdana Waruwu said that a judge is attached to 3 (three) types of justice when handling cases, namely legal justice, moral justice and social justice.

Abdurrahman Rahim said that in the law enforcement process, AI cannot provide benefits because AI cannot consider. AI cannot provide justice even though it uses algorithms, and AI cannot consider the merits of a problem. AI will never be able to replace the profession of a judge, because AI cannot think like humans who have feelings, intention and conscience. The justice provided by AI is rigid and does not care whether the justice is in accordance with the principles of humanity or conscience. Therefore, in deciding a case, devices or tools cannot be replaced in deciding it. A device such as AI can play a role in assisting the law enforcement process in carrying out technical case administration such as making decisions neatly, smoothly and legibly. AI can shape the law enforcement process by selecting judges who are appropriate to the case at hand and adjusted to a judge's workload. Similarly, other law enforcement that can be carried out by AI is by helping law enforcers to find criminals by tracking the whereabouts of criminals. However, to decide on a case or criminal act, one's intuition and conscience are still needed.

Looking at AI technology which can carry out actions and deeds like humans, of course this is the basis for legal regulations in a country to have regulations specifically related to AI. Based on the legal sources in force in Indonesia relating to technology regulation, namely Law Number 19 of 2016 concerning Amendments to Law Number 11 of 2008 concerning Electronic Information and Transactions, hereinafter referred to as "UU ITE", this regulation is a form of state response The rapid development of technology in Indonesia. It is hoped that the ITE Law itself can solve all technology and information system problems in Indonesia to create legal certainty and provide benefits in resolving technology problems. However, the ITE Law does not clearly define AI in its regulations, which has given rise to several opinions from many groups who are trying to interpret AI and link AI to the regulations in the ITE Law. In positive law in Indonesia, namely the ITE Law, AI is classified as an electronic system and an electronic agent, which if you look at the characteristics of AI with the definition of an electronic system in the ITE Law regulations, this has many matches and compatibility where one of the ways AI works can collect data, then processing it, even analyzing it, and being able to display and send electronic information, this is explained in "Article 1 Number 5 of the ITE Law". Then, the basis for classifying AI as an electronic agent is not much different from classifying AI as an electronic

Implementation of Artificial Intelligence ...
(Yusian Eri Fitria, Sri Endah Wahyuningsih & Jawade Hafidz)

Topic: Human Right Issues of Artificial Intelligence (AI) Gaps and Challenges, and Affected Future Legal Development in Various Countries

system, where the suitability of AI's actions and actions is linked to the definition of an electronic agent, namely a device from an electronic system that aims to carry out actions on an electronic system automatically based on people's orders, which of course is in accordance with the characteristics of AI itself based on the understanding of "Article 1 Number 8 of the ITE Law".

In relation to the position of legal subjects associated with AI, this has of course given rise to a lot of debate, with different opinions and viewpoints regarding the position of AI regarding the legal actions it carries out. If the problem of AI as a subject cannot be compared to a legal entity, according to Otto Von Gierke through organ theory, in fact a legal entity is the true reality of a natural nature and personality of humans in their legal relationships. Of course, a legal entity has rights and obligations and can act independently in every decision issued as a legal subject (Amboro & Komarhana, 2021). Another opinion from LJ Van Apeldoorn is "to be able to carry out a legal act, the legal subject itself, in this case, must have the ability to hold the rights given to him" and the meaning of the ability to hold these rights is that the capacity is differentiated from that of a minor in carrying out legal acts. and people under guardianship, in general the person can be given rights which can then be used in carrying out legal acts, but legally the person is not competent in carrying out legal acts and this is what determines a legal subject (Marzuki, 2008). AI cannot be equated with a legal entity to become a legal subject, where a legal entity has clear and firm aims and objectives in its establishment and there is human scope, and AI cannot stand independently, as is known, the computer is regulated and programmed by humans and if the computer or AI makes a decision that can be compared to a human then perfection in that decision cannot be ensured if there is no human supremacy in decision making, because computers are not always free from system errors. According to Satjipto Raharjo, in his progressive legal theory, he states that a progressive law is a law that has freedom in terms of thinking and taking legal action, so that it is able to free the law to provide service to humanity (Yamani, 2016). Of course, this is in line with the legal regulations in force in a country where the legal regulations have freedom in interpreting a purpose in implementing these legal regulations in society.

3.2. The Impact of AI in Legal Education

Furthermore, Artificial intelligence technology has increased the efficiency of administrative processes in legal education institutions. A data management system supported by AI can help in managing student records, lecture schedules and other administration. This allows lecturers and administrative staff to focus on more strategic tasks in improving the quality of legal education. Artificial intelligence has also strengthened the role of students in legal research.

Implementation of Artificial Intelligence ...
(Yusian Eri Fitria, Sri Endah Wahyuningsih & Jawade Hafidz)

Topic: Human Right Issues of Artificial Intelligence (AI) Gaps and Challenges, and Affected Future Legal Development in Various Countries

With the help of intelligent search algorithms, students can quickly identify relevant legal literature and conduct more in- depth analysis. This allows them to be more productive in their legal research, which in turn will support the development of legal science in Indonesia. Artificial intelligence technology has made it possible to develop a more objective evaluation system. With automatic evaluation tools based on artificial intelligence, legal education institutions can provide more consistent and transparent assessments of student performance.³ This will encourage students to improve the quality of their learning and help produce graduates who are better prepared to face the demands of the legal world. The use of artificial intelligence in legal education can also help overcome the problem of unequal access to education.⁴ By providing online access to legal education curricula and resources, Artificial intelligence can help students from remote or low-income areas receive a quality legal education. The development of artificial intelligence technology has had a positive impact on legal education in Indonesia. With wise use, artificial intelligence can continue to support improving the quality of legal education, prepare a generation that is more competent in the world of law, and support improvements to the legal system in Indonesia.

The development of artificial intelligence has become an integral part of the development of global society today. Indonesia as a developing country cannot be separated from its impact.⁵ Artificial intelligence has had a significant influence on various aspects of life, including in the legal realm. Advances in artificial intelligence technology contribute to legal developments in Indonesia. AI technology has made a tremendous contribution in facilitating access to legal information. Thanks to natural language processing algorithms and data analysis, widespread legal sources can be processed quickly and accurately.⁶ The influence of artificial intelligence technology on legal developments in Indonesia also raises various challenges.⁷ Considerations regarding privacy, data security, and the role of humans in making legal decisions are important debates.⁸ Apart from that, there needs to be adequate regulations to regulate the use of artificial intelligence technology in a legal context so that it does not cause injustice or abuse. Furthermore, artificial intelligence technology also has the potential to increase efficiency in the justice system in Indonesia. Automation of legal administration processes, the use of chatbots to provide basic legal information to the public, and data analysis to predict the development of legal cases are examples of the implementation of artificial that can help reduce the workload on law enforcement officers and judges. Thus, this can increase access to justice and speed up the resolution of legal cases. One of the main gaps in the influence of artificial intelligence technology on the development of legal education in Indonesia is the limited access to artificial intelligence technology itself. Top law schools in large cities may have sufficient resources to integrate AI into their curricula, but many legal education institutions in

Implementation of Artificial Intelligence ...
(Yusian Eri Fitria, Sri Endah Wahyuningsih & Jawade Hafidz)

Topic: Human Right Issues of Artificial Intelligence (AI) Gaps and Challenges, and Affected Future Legal Development in Various Countries

remote areas may not have the same access. This can create inequality in the provision of Artificial intelligence training and education to students in legal education. The lack of teaching staff trained in the field of Artificial intelligence technology is also an important gap. Effective legal education on AI requires competent instructors and access to state-of-the-art training resources. However, currently there are still limited numbers of teachers who have a deep understanding of Artificial Intelligence, thus creating obstacles in the development of education. One effort to overcome this problem requires the effective and efficient application of Artificial Intelligence in legal education. Previous research by Carrel on the use of AI technology in legal education can increase learning efficiency by implementing an adaptive learning system that can be adjusted to individual student needs. Research by Ho et al., (2020) states that to understand how law that has been exposed to artificial intelligence faces challenges and opportunities in legal practice, including how AI technology influences the judicial process. However, many studies on artificial intelligence have not found the effect size of artificial intelligence in legal education in Indonesia. Based on this, this research aims to determine the influence of AI technology on the development of legal education in Indonesia.

Legal Challenges in AI Development The development of Artificial Intelligence (AI) technology has been a milestone in the evolution of technology, presenting new opportunities and fundamental changes in the way we interact with the digital world. Even though it provides extraordinary innovation, the development of AI also raises a number of legal challenges that need to be taken seriously. This research aims to outline and analyze the legal challenges that arise along with advances in AI technology, such as: Privacy in the AI Era. The development of Artificial Intelligence (AI) technology has brought revolutionary changes in various aspects of human life. One aspect that was deeply discussed was the privacy challenges that arise along with the penetration of AI in data collection, analysis and management. This research aims to explore the legal challenges that arise regarding privacy in the AI era. AI development fundamentally relies on data, be it user data, behavioral data, or other data. The use of this data, while critical in advancing technology, opens up privacy issues that need serious legal attention. Users The intensive data collection process by AI systems creates a dilemma between technological advances and individual privacy rights. The continuation and depth of data collection by AI systems can potentially violate privacy rights, and in response, legal challenges arise in defining clear boundaries. Ethical questions arise regarding how personal data is processed by AI systems. The legal challenges relate to individuals' rights to know and understand how their personal data is treated by technology, as well as the implications of decisions made by AI algorithms.

Implementation of Artificial Intelligence ...
(Yusian Eri Fitria, Sri Endah Wahyuningsih & Jawade Hafidz)

Topic: Human Right Issues of Artificial Intelligence (AI) Gaps and Challenges, and Affected Future Legal Development in Various Countries

Increasing cases of data security breaches and the risk of cyber attacks add complexity to privacy challenges. This research discusses the legal framework needed to protect personal data from internal and external threats, as well as efforts to minimize its impact on privacy. Existing privacy regulations may need to be adjusted to accommodate the dynamics of AI development. Legal challenges arise in finding a balance between strict privacy protections and the freedom to use data to advance technological innovation. By discussing the legal challenges related to privacy in the AI era, this research is expected to provide in-depth insight into the legal framework needed to protect individual privacy rights as technology advances rapidly.

Artificial Intelligence (AI) technology is entering a new dimension in its role and impact in decision-making, raising deep ethical questions around its implications and consequences. This research explores the complexities of ethical challenges associated with AI decisions, identifies emerging issues and explores legal remedies that can be undertaken to address these dilemmas. In Decision Making AI systems have the ability to make complex decisions, sometimes exceeding human capabilities. In this context, AI decisions can have a significant impact on individuals, society, and the environment, tipping the scale of responsibility and ethical considerations. Decision Makers AI algorithms, which form the basis of decision making, sometimes harbor certain biases or tendencies. This creates ethical challenges because decisions made by AI can create or perpetuate inequality, discrimination, or injustice. AI is often complex and difficult for users or even policymakers to understand. Understanding and responsibility for these decisions is an ethical issue that requires clarification and a clear legal framework.

AI In making decisions that affect everyday life, AI raises questions about the social and human impact of its decisions. The ethical challenges here involve considerations about human values, justice, and long-term impacts on society. The importance of developing ethical guidelines and decision standards for the development and use of AI is critical. This research explores legal measures that can be taken to formulate guidelines and standards that can accommodate the ethical values of society at large. By exploring ethical challenges in AI decisions, this research is expected to provide substantial insight into how the law can help guide the development and use of Artificial Intelligence Technology with full ethical considerations. Security and Threats to AI Systems The increasingly widespread use of Artificial Intelligence (AI) technology not only brings innovation, but also raises serious concerns regarding security. Threats to AI systems from cyberattacks and manipulation can have detrimental impacts and require serious legal attention.¹⁷ This research discusses security challenges in the context of AI and explores legal remedies that can be taken to protect system integrity. Technological developments and all their dynamics are global changes that have quite a significant impact on a country. Likewise

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(Yusian Eri Fitria, Sri Endah Wahyuningsih & Jawade Hafidz)

Topic: Human Right Issues of Artificial Intelligence (AI) Gaps and Challenges, and Affected Future Legal Development in Various Countries

in Indonesia, technological developments have had a big impact on people's lives. This development fundamentally changes society, both in terms of behavior, patterns of social relations, and ways of working. Indonesia as a country of law certainly regulates the lives of its people with applicable laws. It is hoped that the current law will be able to become the basis for resolving all existing problems. Current developments present the fact that technology has taken a very important role in people's lives. In the end, it must be acknowledged that technology will determine the sustainability of human life, especially Indonesia, which is currently facing the industrial revolution 4.0. Studies say that the term industrial revolution 4.0 first appeared in 2011, when the German government introduced a technology utilization strategy called industry 4.0. Behind the development of industry 4.0, there are technological developments that have become activators for the start of this era, namely artificial intelligence (AI) or what is usually called artificial intelligence.

4. Conclusion

The research results show that AI as a tool or device in law enforcement is more appropriate for helping law enforcers with administrative techniques, prevention efforts, and finding perpetrators of criminal acts. AI cannot replace determining justice or policy, because AI does not have feelings, intention and conscience. In facing an era of rapid development of Artificial Intelligence (AI) technology, the legal challenges that arise require a wise and holistic response.

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Implementation of Artificial Intelligence ...
(Yusian Eri Fitria, Sri Endah Wahyuningsih & Jawade Hafidz)

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Implementation of Artificial Intelligence ...
(Yusian Eri Fitria, Sri Endah Wahyuningsih & Jawade Hafidz)



Topic: Human Right Issues of Artificial Intelligence (AI) Gaps and Challenges, and Affected Future Legal Development in Various Countries

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