Ensuring Human Rights in the Era of Artificial Intelligence: Ukraine and Practice of ECHR

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Abstract
Artificial intelligence gets into all spheres of life which are familiar to us. Automation and optimization of various processes make our daily tasks much easier. The topicality of the research is due to the rapid development and improvement of artificial intelligence, and therefore it is important to familiarize yourself with all aspects of its application. In the course of the study, laws of Ukraine, the practice of the ECHR, as well as international legal documents was analysed. This research is aimed at determining all aspects of the use of artificial intelligence in various spheres of society, its impact on the ways to protect human rights within the framework of these legal relations. The study pays particular attention to the risks which exist in connection with handling of personal information from artificial intelligence, the extent of the impact on our privacy rights, our freedoms and our opportunities. The research is based on issues of the application of artificial intelligence, for example, on solving problems with discrimination, inequality and various social issues. Furthermore, the proposals for the development of legal aspects of the protection of human rights in the context of artificial intelligence at the Ukrainian and international levels are formulated. This research is very important for understanding and developing effective measures to protect our rights and freedoms in this new technological world.
Keywords: Artificial Intelligence; Human Rights; Human Rights Risks; Technologies; Privacy.

Introduction

The human rights protection in the era of artificial intelligence (hereinafter – AI) is relevant nowadays. The growing use of AI in various areas of people's lives, including medicine, transportation, finance, entertainment and many others, results in the growth of the number of issues of the protection of human rights. In a world where AI has become more common and well-known, the human rights protection in this new era requires further investigation. AI can be used to solve various problems and make people's lives easier. However, it can create threats to the realization of human rights and freedoms.

For example, there is a risk that AI systems may be programmed with stereotypes about certain groups of people, which could lead to discrimination. In addition, the increased use of AI may also lead to a violation of people's privacy and an increase in the influence of corporations on people's lives.[1] Consequently, it is necessary to analyze the protection of human rights in the context of AI application and to ensure the appropriate legal and ethical framework in this sphere. That is why, in the context of our research, Ukrainian legislation, ECHR practice in the sphere of AI and international legal documents on the above issue were analyzed. It is also essential to guarantee the access to information about what data is collected and used by AI systems, as well as how it affects people's lives.

In today's world, the development of AI occupies more and more space, both in scientific research and in industry. AI can be used to solve various problems and make life easier for people, for example, in autonomous cars, medical diagnosis systems and in other fields.[2] However, at the same time, AI may violate our rights and freedoms if the necessary measures are not taken to protect them. For example, AI may collect and process our personal data without our consent, using it for advertising purposes or making decisions about our capabilities, rights and possible risks.

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[1] I. Kopotun, [*et.,al.*], 'Health-Improvement Competences Formation Technique in Future Police Officers by Means of Personality-Oriented Approach to Physical Education' (2019) 18 International Journal of Learning, Teaching and Educational Research.[205-217].

[2] C Muller, *The Impact of Artificial Intelligence on Human Rights, Democracy and the Rule of Law* (ALLAI 2020).

In addition, in the case of improper configuration or use of AI, problems of discrimination and social inequality may arise, which violate our rights to equality.[3] Moreover, it is important to pay attention to ethical issues of the creation and use of AI, for example, the issue of responsibility for the actions of AI systems and their influence on our rights and freedoms.

Therefore, ensuring human rights in the era of the development of AI is a very important task which requires the attention of scientists, lawyers and politicians from all over the world. Only the interaction of these groups can lead to the taking appropriate steps to protect our rights and freedoms in this new technological world. Thus, ensuring human rights in the era of AI development is important to consider and solve in order to ensure a balanced use of technologies which help improve the quality of people's lives, but at the same time do not violate their rights and freedoms.

Artificial Intelligence and its Characteristic Features

Today, AI is not anything unrealistic and fantastic. If ten years ago we could enjoy its benefits only in science fiction, now we can easily use it in everyday life. However, as in many utopian films, in reality violations of human rights occur due to the use of AI. Its influence on people's daily life is growing, and its use in technical developments is already mandatory.

In the aspect of our research, it is worth understanding the concept of AI and its characteristics. The term "artificial intelligence" was coined in 1956. It happened at the Dartmund Conference during John McCarthy's speech. However, it is worth adding that the empirical test for determining AI was proposed by Alan Turing back in 1950, when such a term did not yet exist. This test assumed that a thinking machine is a machine which a person considers to be a person in the process of

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[3] B Wagner,[*et.,al.*], *Algorithms and Human Rights: Study on the Human Rights Dimensions of Automated Data Processing Techniques and Possible Regulatory Implications* (Council of Europe 2018).

communicating with it.[4] That is why it is not surprising that over time AI began to solve a number of issues (thanks to the given software systems and algorithms) in the same way as a person would solve them.

Researchers Čerka, Grigienė and Sirbikytė in their works indicate that AI is a new phenomenon which is insufficiently studied in a number of aspects. It differs from ordinary computer algorithms in the ability to teach itself based on accumulated knowledge and experience. It is this possibility which allows AI to have different options for solving similar problems depending on the actions performed earlier.[5] On the basis of this, it is possible to assert the immensity of the possibilities of AI and, accordingly, their obscurity. Moreover, Russell and Norvig in their work determine AI as a general term that embraces a scope of technologies aimed to enhance the capacity of machines to do certain actions using intelligence, for example, paradigm identification, language processing, etc.[6]

The following definition of AI and its characteristic features is also provided. AI systems are special software that is developed by people and operate in the digital dimension, usually with a direct manifestation in the physical dimension. AI perceives the environment with the help of collected data, transforms, considers and processes this data, and makes decisions about the most optimal actions to solve the tasks to achieve a specific goal. AI systems can either use well-defined algorithms and learn a numerical model. Among them, they can be flexible to a specific conditions, taking into account their previous analyzes and suggestions, analyzing how they affected the surrounding world the previous time.[7]

Therefore, the following definition of AI can be given, namely: AI is a certain software product which is capable of self-learning and self-development, aimed at

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[4] V Beschastnyi,[*et.,al.*] 'Place of Court Precedent in the System of Law of the European Union and in the System of Law of Ukraine' (2019) 22 Journal of Legal, Ethical and Regulatory.[1-6].

[5] P Čerka,[*et.al.*] 'Liability for Damages Caused by Artificial Intelligence' (2015) 31 Computer Law And Security Review.[376–389].

[6] S Russell, *Artificial Intelligence: A Modern Approach* (Pearson Education 2010).

[7] V Teremetskyi, [*et.,al.*]'State Policy of Ukraine in Terms of Implementing Law Enforcement Function of the Country in the Taxation Sphere' (2021) 24 Journal of Legal, Ethical and Regulatory Issues <https://www.abacademies.org/articles/state-policy-of-ukraine-in-terms-of-implementing-law-enforcement-function-of-the-country-in-the-taxation-sphere.pdf>.[1-9].

processing and analyzing data and providing solutions to specific problems faced by humans. The characteristic features of AI are:

- the capacity for learning and improvement, which in the future will make artificial intelligence more efficient and accurate in the performance of various tasks;
- the ability to quickly analyze a large amount of data;
- automation of tasks that facilitates the completion of complex multi-step tasks that usually require the application of human intellectual work;
- performing tasks in real time here and now;
- the scalability of AI systems - the possibility of its application in various spheres of human activity;
- emotionlessness - AI is not endowed with emotions, like a human, and therefore is able to solve tasks based only on available objective data;
- decentralization of AI systems - systems are generally located on different servers, which allows access to them from any place.

AI and Human Rights: Impacts and Protection

Having analyzed the features of AI, we can say with confidence that it and its capabilities can significantly simplify a person's life. However, such simplification can be harmful to humans, violating their fundamental rights and causing damage to their existence. The development of AI systems should be accompanied not only by close attention and multi-stage verification, but also by the creation of appropriate security systems, transparency and impartiality in testing AI systems. After all, failure to take these steps can lead to disastrous consequences due to the impossibility of predicting the actions of AI and crossing the lines of respect for fundamental human rights. Due to the rapid improvement of AI systems, the scale of such violations of human rights can increase significantly.[8] Therefore, the potential of AI should be kept under control and the possibilities of its influence and application should be studied in detail.

The right to life is the basic human right. This right is enshrined in a number of international documents. In this regard, the Universal Declaration of Human

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[8] R Wexler, 'Life, Liberty, and Trade Secrets: Intellectual Property in the Criminal Justice System' (2017) 7 Stanford Law Review <https://doi.org/10.2139/ssrn.2920883>.[1343–1429].

Rights,[9] the International Covenant on Civil and Political Rights,[10] and the Charter of Fundamental Rights of the European Union[11] note that the right to life is an indispensable right of everyone, it is protected by law and ensured by the state. In other words, it is guaranteed that no one can be denied the right to life.[12]

AI is an effective tool in protecting the right to life, because it is widely used in healthcare when diagnosing cancer, identifying suicidal tendencies, or preventing other serious diseases.[13] Thanks to the capabilities of AI, doctors are able to conduct consultations and diagnose various conditions of patients remotely. Nevertheless, AI contributed to the improvement of medical equipment, and now it is much easier to use it to perform operations in places which are difficult for doctors to access. It is also important to note that the development of genetic engineering and various genetic testing poses certain threats. With the help of such developments and capabilities of AI, it is possible to plan pregnancy and endow children with specific qualities. However, if such qualities cannot be obtained, the termination of pregnancy is carried out only for these reasons, and not for physiological reasons.[14] These are examples of the positive influence of AI on human life that do not violate people's rights.

In addition to assistance in the medical field, AI systems are also significant in the defense field for obtaining information about the course of military actions, the results of such actions, ways to improve them, conducting intelligence and organizing cyber defense. Fully automated types of weapons are actively being developed and are already being used on the battlefield, which, unfortunately, can lead to the death of

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9 'The Universal Declaration of Human Rights' (1948) <https://zakon.rada.gov.ua/laws/show/995_015?lang=en#Text >.

10 'The International Covenant on Civil and Political Rights' (1966) <https://www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-civil-and-political-rights >.

11 'The Charter of Fundamental Rights of the European Union' (2000) <https://zakon.rada.gov.ua/laws/show/994_524#Text>.

12 'The Universal Declaration of Human Rights' (n 9).

13 Turuta, O.P., and Turuta, O.V., 'Artificial Intelligence through the Prism of Fundamental Human Rights' (2022) 71 Scientific Bulletin Of The Uzhhorod National University <https://doi.org/10.24144/2307-3322.2022.71.7>.[49-54].

14 Britchenko, I., Monte,[*et.,al.*], 'The Comparison of Efficiency and Performance of Portuguese and Ukrainian Enterprises' (2018) 27 Ikonomicheski Izsledvania.[87-108].

a significant number of civilians. The use of AI capabilities in transport can reduce the number of accidents on the road, but it can also increase.[15] This is a rather ambiguous application of AI, because the threat to human life remains quite high. This is the manifestation of the threat to human life from AI systems.

In the context of our study, it is also necessary to pay attention to the fact that the Universal Declaration of Human Rights and the International Covenant on Civil and Political Rights (1948) establish that all people have the right to liberty and security. A person cannot be detained without legal grounds for this action and remains innocent until proven guilty by the law.[16] In this context, AI can be used to monitor human rights, analyze social media, identify discrimination and rights violations. AI-based analytical systems can help identify and address human rights issues. It is also possible to apply AI to analyze big data to identify human rights violations, discrimination, xenophobia and other negative phenomena. AI analytical models help identify patterns and trends, making it easier to monitor and enforce human rights. AI can help create technologies that make life easier for people with disabilities, such as speech recognition systems, speech synthesis or motion support devices.

These rights are fundamental and inviolable, and the use of AI technologies in legal proceedings may lead to a direct violation of such rights. As an example, we can cite the development of software which is "capable of detecting recidivists" and identifying a person with a low or high risk of committing an offense again. This system contains data about the past of such persons and, based on this, provides conclusions about their theoretical future. Such software is actively used by Canada, Great Britain and the USA and has already shown its problematic points. The main drawback of this system was the fact that all "dark-skinned" or representatives of national minorities are assigned a kind of label with the mark "high probability

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[15] Livingston, S., and Risse, M., 'The Future Impact of Artificial Intelligence on Humans and Human Rights' (2019) 33 Ethics & International Affairs <https://doi.org/10.1017/S089267941900011X >.[141-158].
[16] 'The Universal Declaration of Human Rights' (n 9).

of committing an offense", and it in turn contributed to the complication of bail conditions, which entailed detention before the court. Such circumstances led to harsher verdicts and increasing prison terms.[17]

Additionally, the Supreme Court of Canada made the following findings in Ewert v. Canada regarding the use of such systems: AI tools developed for using information from majority groups may not be sufficient to predict the same traits in minority groups . It, in turn, has a significant impact on the rehabilitation of minority offenders, including their access to cultural programs and parole opportunities.[18]

The use of the specified systems for predicting the possibility of committing a particular offense presupposes a direct breach of the right to a fair trial. After all, the court relies on AI systems and its theoretical predictions, assigning the level of future guilt, and it, in turn, nullifies the existence of the presumption of innocence. However, the use of such software should be regulated at the legislative level and not carried out as an experiment or in an arbitrary form to facilitate the judge's work.

The issue of the introduction of face recognition systems is quite acute now. System data is important during the arrest of an offender and often the speed of obtaining such data can help in the investigation of offenses before stopping the criminal. However, they are far from ideal in their functioning and very often contribute to false arrests and loss of time due to the similarity of people's features.[19]

In this regard, the right to privacy and data protection is another basic human right, which are enshrined in the Universal Declaration of Human Rights,[20] the International Covenant on Civil and Political Rights,[21] and the Charter of Fundamental Rights of the European Union[22]. These documents state that any

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[17] J Abrhám,[*et.,al*.], 'Energy Security Issues in Contemporary Europe' (2018) 7 Journal of Security and Sustainability Issues.

[18] F Raso,[*et.,al*.] 'Artificial Intelligence and Human Rights: Opportunities and Risks' (2018) 6 The Berkman Klein Center for Internet & Society Research Publication Series.[63].

[19] Brauneis, R., and Goodman, E., 'Algorithmic Transparency for the Smart City' (2018) 20 The Yale Journal of Law and Technology <https://www.yjolt.org/sites/default/files/20_yale_j._l._tech._103.pdf >.[103–176].

[20] 'The Universal Declaration of Human Rights' (n 9).

[21] 'The International Covenant on Civil and Political Rights' (1966).

[22] 'The Charter of Fundamental Rights of the European Union' (n 11).

person is guaranteed the right to one's private and family life, in particular, the protection of personal information. This information should be used in accordance with the established rules and should be permitted by the authorized person.

There is no doubt that applications developed with the help of AI greatly simplify the process of gathering information and make everyday life easier. Since AI by its nature is capable of self-learning and self-improvement, it is quite likely that with the help of such processes, both private personal data and banking or state secrets may be exposed. Such disclosure may be based on Internet "traces" of visited sites, social networks, search queries, etc.[23] The regulation of AI systems is a very important issue because otherwise it will put an end to anonymity and freedom to enjoy the rights (for example, the right to freedom of movement, freedom of speech, etc.). Under such conditions, people are able to resort to self-censorship and refusal to freely express their opinion not only in social networks, but also in real life.[24]

AI performs a crucial function in the labor sphere, namely in the process of automating the labor process. A direct breach of the right to work, in particular, the access to the labor market, is carried out precisely in the course of such automation. The automation of many processes has already led to the loss of jobs for thousands of people, so it is not excluded that in the future it will lead to the loss of even more jobs.[25] This is a positive development for business owners, as it brings significant cost savings, but on a large scale it can cause mass unemployment and poverty. The negative consequences can also be compounded by significant gaps in pay, which will cause greater inequality among people. In general, the standard of living of people in all its manifestations may deteriorate. However, if you invent a reasonable approach to solving this problem, then these shortcomings can easily turn into positive developments. After all, with the emergence of new relationships, new opportunities arise and, as a result, new spheres of life which need to be regulated

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[23] A V Rusnak, [et.al.], 'Innovative Priorities of Ukraine in the Context of Global Economic Trends' (2020) 11 Journal of Advanced Research in Law and Economics <10.14505/jarle.v11.4>.

[24] Wagner (n 3).

[25] Gries, T., and Naudé, W., 'Artificial Intelligence, Jobs, Inequality and Productivity: Does Aggregate Demand Matter?' (2018) 12005 IZA DP.[39].

and in which we will exist. That is why, along with the loss of jobs, new jobs and new professions may arise which will require specialists.

Meanwhile, due to the rapid development of AI systems, the issues of its influence on the fulfilment of the right to equality and non-discrimination arises. Since AI is a specific program, it functions thanks to given algorithms. Such algorithms carry out appropriate sorting and filtering of data. What is more, such sorting can be carried out in the aspect of a human. Unlike humans, AI does not have emotions, so it cannot hide discrimination. Discrimination in the manifestations of AI will be carried out more strongly, and other prejudiced attitudes may also increase significantly because AI may not be adapted to consciously counteract different prejudices.[26]

A clear example of bias on the part of AI systems can be given during the recruitment of personnel with the help of automated recruiting services, which give preference to men over women. Also, very often AI systems can provide worse service or produce offensive or demeaning results for a certain group of people. For example, such systems are worse at recognizing faces of the Asian type or dark-skinned people. It manifests direct stereotypical ideas which are not confirmed by anything in real life.[27]

It is important to develop a legal and ethical framework that governs the application of AI, protecting human rights, privacy and justice. Research, policy development and active public participation are key elements for enhancing the positive AI influence on human rights.

Legislative Regulation Of Ensuring Human Rights In The AI Era And The ECHR Decisions

One of the most important documents on preserving human rights in the AI era is the Universal Declaration of Human Rights of the United Nations[28].

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[26] N Lytvyn,[*et.,al.*] 'Enforcement of Court Decisions as a Social Guarantee of Protection of Citizens Rights and Freedoms' (2022) 39 Prawo i Wiez <10.36128/priw.vi39.351>.[80-102].

[27] N Azmuk, 'Artificial Intelligence in the Work Process in the Digital Economy: New Challenges and Opportunities' (2019) 57 Economic Bulletin.[137-145].

[28] 'The International Covenant on Civil and Political Rights' (n 10).

The provisions of this document define basic human rights, such as the right to life, freedom of choice, thought, conscience and religion, etc. Importantly, the Universal Declaration[29] declares that these rights must be guaranteed without any discrimination, including discrimination based on the level of technological development.

The European Parliament resolution with recommendations to the Commission on Civil Law Rules on Robotics[30] is quite important for regulating the spectrum of legal relations covered in our study. This Resolution became the first legal act that established and unified standards for the use of AI. In general, this document is advisory in nature, but these recommendations will become the basis for further elaboration and unification of the legislation on the regulation of relations related to artificial intelligence. The resolution provides the legal basis for the use of AI systems and the implementation of the European register of AI systems.[31] The text of the document also emphasizes the drawbacks of the regulation of these legal relations, including the compensation for damages and contractual legal relations.

One of the most relevant documents in this context is Ethics guidelines for trustworthy AI.[32] These recommendations define the basic principles and rules be taken into account when developing and using artificial intelligence systems. They determine that AI systems must be resistant to criminal activity, be used only with the permission and consent of the user, and not lead to various forms of discrimination.

Ukraine, in turn, is already quite actively using international experience regarding the AI usage regulations. On the basis of international documents, the Ministry of Digital Transformation of Ukraine developed the Concept of the

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[29] ibid.

[30] 'European Parliament Resolution with Recommendations to the Commission on Civil Law Rules on Robotics (2015/2103(INL)). (2017).' <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52017IP0051 >.

[31] Tokarieva, K., and Savliva, N., 'Peculiarities of Legal Regulation of Artificial Intelligence in Ukraine. Scientific Works of National Aviation University' (2021) 3 Law Journal 'Air and Space Law'.[148–153]

[32] The High-Level Expert Group on AI, 'Ethics Guidelines for Trustworthy AI' (*European Commission*, 2019) <https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai> accessed 1 January 2023.

Development of Artificial Intelligence in Ukraine.[33] This Concept emphasizes the education of developers of AI systems, the management of enterprises using AI, and the active implementation of AI technologies in the state sector and the main industries of the country.[34] At the same time, the provisions of the Concept provide for the need to respect personal privacy and data confidentiality.

The following regulatory and legal documents are important legal documents that regulate issues of legal aspects of AI usage: the Law of Ukraine "On the Basic Principles of Cybersecurity in Ukraine", which contains the main principles and directions of activity in the field of cyber security in the state and also establishes requirements for data protection from possible cyber attacks[35]; the Criminal Code of Ukraine, which defines crimes committed using computers and telecommunication networks, and establishes criminal liability for such acts;[36] the Law of Ukraine "On Personal Data Protection", which regulates the processing of personal information and seeks to defend the basic human rights and freedoms, in particular the right to private life and personal data protection.[37]

Further implementation of legal norms and improvement of the regulation of these legal relations requires a detailed analysis of international norms, current realities, problems faced by society when using the benefits of AI, as well as the practice of the ECHR on these issues. Thus, Article 8 of the European Convention on Human Rights declares the right to private life. In the digital world, this also involves

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[33] Order of the Cabinet of Ministers of Ukraine, 'On the Approval of the Concept of the Development of Artificial Intelligence in Ukraine' (*Verkhovna Rada of Ukraine : Legislation of Ukraine*, 2020).[1556]. <https://zakon.rada.gov.ua/laws/show/1556-2020-p?lang=en#Text> accessed 21 January 2023.

[34] deps, 'A Concept for the Development of Artificial Intelligence Was Developed in Ukraine' (*2020*) <https://deps.ua/ua/news/novosti-rynka/8118.html> accessed 4 February 2023.

[35] Law of Ukraine, '№ 2163-VIII «On the Basic Principles of Cybersecurity in Ukraine»' (*GOV.UA*, 2017) <https://zakon.rada.gov.ua/laws/show/2163-19?lang=en#Text> accessed 23 January 2023.

[36] Verkhovna Rada of Ukraine : Legislation of Ukraine, 'The Criminal Code of Ukraine, № 2341-III.' (*Verkhovna Rada of Ukraine : Legislation of Ukraine*, 2001) <https://zakon.rada.gov.ua/laws/show/en/2341-14#Text > accessed 14 January 2023.

[37] Law of Ukraine, '№ 2297-VI "On Personal Data Protection"' (*Verkhovna Rada of Ukraine: Legislation of Ukraine*, 2010) <https://zakon.rada.gov.ua/laws/show/en/2297-17#Text> accessed 14 January 2023.

personal information protection, including the confidentiality of correspondence, monitoring of sites and social networks, and secure communication. The European Court in Case of S. and Marper v. The United Kindgom[38] noted that the protection of personal data is essential for the ability of an individual to exercise the right to privacy and family life.

In case of Roman Zakharov v. Russia[39], the applicant declared the breach of his right to confidentiality of negotiations. In his application, the applicant also demanded effective remedies against such illegal actions. In its decision, the ECHR pointed to the prohibition of general surveillance or interception of information by state authorities during the exercise of their authority, if this is not permitted by the law, in order to prevent the abuse of one's rights. In its practice on covert surveillance measures, the Court defined the minimum guarantees that must be laid down in the law to eschew abuse of power, in particular: defining the crimes for which an interception order is issued; determination of the circle of persons whose telephones can be tapped; limiting the duration of listening to the phone; the procedure for studying, using, and storing the received information; conditions to be followed when transferring data to third parties; grounds for destruction of records.[40]

One of the most famous cases involving AI systems is the Case of Big Brother Watch and Others v. United Kingdom.[41] This case involved complaints filed in by journalists and human rights organizations against three different modes of surveillance: (1) surveillance of communications; (2) sharing information with governments in other countries; (3) receiving information obtained from communication service systems. The ECHR recognized the circumstances related

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[38] *Case of S and Marper v The United Kindgom (2008) Applications no 30562/04 and 30566/04.*
[39] *Case of Roman Zakharov v Russia (2015) Application no 47143/06.*
[40] 'Review of the Practice of the European Court of Human Rights in Application of Article 8 of the European Convention on Human Rights (Criminal Procedural Aspect)' (2020) <https://ips.ligazakon.net/document/VAA00006 >.
[41] 'Case of Big Brother Watch and Others v. United Kingdom. (2018). Applications No. 58170/13, 62322/14, 24960/15.'

to the first and third points as violating Article 8 of the Convention. In its decision, the Court also ruled that receiving and processing of people's personal information, obtained with the help of AI, may jeopardize the right to privacy and personal data protection.[42] This case became the basis for ensuring adequate guarantees by national legislation for the protection of these rights.

Another important case is the Case of Breyer V. Germany[43], where the Court ruled that all information collected by AI systems is also personal data subject to protection under the Convention and national law. This case is a direct confirmation that data processing by AI is also subject to protection from human rights violations.[44] Since AI systems has only recently been introduced into our usual life, and relations are only developing and spreading, the practice of the ECHR is not so rich. However, despite this, the practice of the ECHR is an effective tool for improving international and national legislation on AI.

Approaches to Human Rights Protection in the AI Era

Based on our analysis of AI systems and their influence on human rights, it is possible to identify the following approaches to the protection of human rights in the era of AI:

1. at the initial stage of creating any technology equipped with AI, it is necessary to estimate training data applied to "train" the system. This is a preventive rationale for preventing bias or discriminatory elements and risks that could lead to a system making biased decisions;
2. consideration of algorithms for complex interactions: when the AI system is put into operation, it will interact with the environment in such a way as to achieve the results, which may not have been laid down at the initial stage. They exercise a considerable influence on human rights. For example, their impact can be detected using certain analytical techniques, but there is a possibility that certain consequences for human rights will be impossible to predict using existing analytics mechanisms due to the stagnation of AI systems;[45]

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[42] ibid.

[43] *Case of Breyer V Germany (2020) Application no 50001/12.*

[44] *ibid.*

[45] Artificial intelligence and human rights, *Risks and Opportunities* (Harvard University:Publishing House of the Berkman Center for Analytical Research on the Internet and Society 2018).

3. development of legal acts on the regulation of relations related to AI: such acts should apply to all spheres of life, be relevant for the present time and protect human rights to life, privacy, fair trial, etc.;

4. development of ethical norms and standards which regulate the implementation of AI and its development. Such ethical norms should guarantee transparency and ensure control over the legal relations in the AI era, ban the AI usage for illegal goals, and establish liability for human rights violations;

5. raising the awareness of the population: it is necessary to carry out educational work among the population in order to increase the level of knowledge about the AI use, the way to protect oneself in cyberspace;

6. establishing cooperation between representatives of various spheres of life, from human rights defenders to representatives of public organizations, regarding the solution of issues of human rights protection in the information space with the involvement of AI;

7. development of specific algorithms which will exclude the possibility of biased attitudes and discrimination towards people;

8. monitoring the AI with the aim of preventing its use for harmful purposes, detecting violations of human rights and implementing mechanisms to prevent it in the future.

Conclusions

AI is a type of information technology which performs fast data processing and performs those tasks that require a person to use intellectual capabilities. AI brings many opportunities, both for ordinary people and for various types of enterprises and states as a whole. Based on our analysis of AI systems, in particular, their impact on human rights, we can note that AI, along with facilitating many processes in our lives, has also brought many difficulties and violations.

First of all, AI plays a positive role in medicine, defense, education, work and, of course, in the private life of each of us. After all, timely diagnosis of diseases, conducting operations that are difficult for human hands, obtaining intelligence data for the benefit of the state, optimizing work processes and educational programs significantly help us to coexist comfortably.

However, the active use of AI entails a range of problems, namely: loss of jobs, interference in private life, manifestation of discrimination, etc. Therefore, to diminish the risks arising from the AI use, it is advisable to develop detailed regulation of legal relations in this area, establish responsibility for

violations of the use of AI, and take all actions to prevent and detect violations of human rights.

Hence, an essential task is to develop mechanisms for ensuring human rights in the era of AI so that a holistic approach to the development and implementation of AI with the mandatory regulation of the issue of human rights protection is preserved.

Bibliography

Abrhám J, ,[*et.,al.*] ,'Energy Security Issues in Contemporary Europe' (2018) 7 Journal of Security and Sustainability Issues.

Artificial intelligence and human rights, *Risks and Opportunities* (Harvard University:Publishing House of the Berkman Center for Analytical Research on the Internet and Society 2018).

Azmuk N, 'Artificial Intelligence in the Work Process in the Digital Economy: New Challenges and Opportunities' (2019) 57 Economic Bulletin.

Beschastnyi V, [*et.,al.*]'Place of Court Precedent in the System of Law of the European Union and in the System of Law of Ukraine' (2019) 22 Journal of Legal, Ethical and Regulatory.

Brauneis, R., and Goodman E, 'Algorithmic Transparency for the Smart City' (2018) 20 The Yale Journal of Law and Technology <https://www.yjolt.org/sites/default/files/20_yale_j._l._tech._103.pdf >.

Britchenko, I., Monte,[*et.,al.*],, 'The Comparison of Efficiency and Performance of Portuguese and Ukrainian Enterprises' (2018) 27 Ikonomicheski Izsledvania.

'Case of Big Brother Watch and Others v. United Kingdom. (2018). Applications No. 58170/13, 62322/14, 24960/15.'.

Čerka P,[*et.,al.*] 'Liability for Damages Caused by Artificial Intelligence' (2015) 31 Computer Law And Security Review.

deps, 'A Concept for the Development of Artificial Intelligence Was Developed in Ukraine' (*2020*) <https://deps.ua/ua/news/novosti-rynka/8118.html> accessed 4 February 2023.

'European Parliament Resolution with Recommendations to the Commission on Civil Law Rules on Robotics (2015/2103(INL)). (2017).' <https://eur-lex.

europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52017IP0051 >.

Gries, T. and Naudé W, 'Artificial Intelligence, Jobs, Inequality and Productivity: Does Aggregate Demand Matter?' (2018) 12005 IZA DP.

Kopotun I.,[*et.,al.*] 'Health-Improvement Competences Formation Technique in Future Police Officers by Means of Personality-Oriented Approach to Physical Education' (2019) 18 International Journal of Learning, Teaching and Educational Research.

Law of Ukraine, '№ 2297-VI "On Personal Data Protection"' (*Verkhovna Rada of Ukraine: Legislation of Ukraine*, 2010) <https://zakon.rada.gov.ua/laws/show/en/2297-17#Text> accessed 14 January 2023.

——, '№ 2163-VIII «On the Basic Principles of Cybersecurity in Ukraine»' (*GOV. UA*, 2017) <https://zakon.rada.gov.ua/laws/show/2163-19?lang=en#Text > accessed 23 January 2023.

Livingston, S., and Risse, M., 'The Future Impact of Artificial Intelligence on Humans and Human Rights' (2019) 33 Ethics & International Affairs <https://doi.org/10.1017/S089267941900011X >.

Lytvyn N, [*et.,al.*]'Enforcement of Court Decisions as a Social Guarantee of Protection of Citizens Rights and Freedoms' (2022) 39 Prawo i Wiez <10.36128/priw.vi39.351>

Muller C, *The Impact of Artificial Intelligence on Human Rights, Democracy and the Rule of Law* (ALLAI 2020).

Order of the Cabinet of Ministers of Ukraine, 'On the Approval of the Concept of the Development of Artificial Intelligence in Ukraine' (*Verkhovna Rada of Ukraine : Legislation of Ukraine*, 2020) <https://zakon.rada.gov.ua/laws/show/1556-2020-p?lang=en#Text > accessed 21 January 2023.

Raso F,[*et.,al.*] 'Artificial Intelligence and Human Rights: Opportunities and Risks' (2018) 6 The Berkman Klein Center for Internet & Society Research Publication Series.

'Review of the Practice of the European Court of Human Rights in Application of Article 8 of the European Convention on Human Rights (Criminal Procedural Aspect)' (2020) <https://ips.ligazakon.net/document/VAA00006 >.

Rusnak A V,[*et.,al.*] 'Innovative Priorities of Ukraine in the Context of Global Economic Trends' (2020) 11 Journal of Advanced Research in Law and Economics <10.14505/jarle.v11.4>.

Russell S, *Artificial Intelligence: A Modern Approach* (Pearson Education 2010).

Teremetskyi V, [*et.,al.*]'State Policy of Ukraine in Terms of Implementing Law Enforcement Function of the Country in the Taxation Sphere' (2021) 24 Journal of Legal, Ethical and Regulatory Issues <https://www.abacademies.org/articles/state-policy-of-ukraine-in-terms-of-implementing-law-enforcement-function-of-the-country-in-the-taxation-sphere.pdf>.

'The Charter of Fundamental Rights of the European Union' (2000) <https://zakon.rada.gov.ua/laws/show/994_524#Text >.

The High-Level Expert Group on AI, 'Ethics Guidelines for Trustworthy AI' (*European Commission*, 2019) <https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai> accessed 1 January 2023.

'The International Covenant on Civil and Political Rights' (1966) <https://www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-civil-and-political-rights >.

—— (1966).

'The Universal Declaration of Human Rights' (1948) <https://zakon.rada.gov.ua/laws/show/995_015?lang=en#Text >.

Tokarieva, K., and Savliva, N, 'Peculiarities of Legal Regulation of Artificial Intelligence in Ukraine. Scientific Works of National Aviation University' (2021) 3 Law Journal 'Air and Space Law'.

Turuta, O.P., and Turuta, O.V 'Artificial Intelligence through the Prism of Fundamental Human Rights' (2022) 71 Scientific Bulletin Of The Uzhhorod National University <https://doi.org/10.24144/2307-3322.2022.71.7>.

Verkhovna Rada of Ukraine : Legislation of Ukraine, 'The Criminal Code of Ukraine, № 2341-III.' (*Verkhovna Rada of Ukraine : Legislation of Ukraine*, 2001) <https://zakon.rada.gov.ua/laws/show/en/2341-14#Text > accessed 14 January 2023.

Wagner B, *Algorithms and Human Rights: Study on the Human Rights Dimensions of Automated Data Processing Techniques and Possible Regulatory Implications* (Council of Europe 2018).

Wexler R, 'Life, Liberty, and Trade Secrets: Intellectual Property in the Criminal Justice System' (2017) 7 Stanford Law Review <https://doi.org/10.2139/ssrn.2920883>.

Case of Breyer V Germany (2020) Application no 50001/12.

Case of Roman Zakharov v Russia (2015) Application no 47143/06.

Case of S and Marper v The United Kindgom (2008) Applications no 30562/04 and 30566/04

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