Clío
Revista de Historia, Ciencias Humanas y Pensamiento Crítico
ISSN 2660-9037

Adscrita a:
Fundación Ediciones Clío
Academia de la Historia del Estado Zulia
Centro Zuliano de Investigaciones Genealógicas

Sección: **Artículo científico** | **2025**, julio-diciembre, año 5, No. 10, 562-594

Moral borders and philosophical consideration of Artificial Intelligence: exploring responsibility, rights and ethical decision making

Zhang, Qihui[1]
Correo: qihzhang@outlook.com
Orcid: https://orcid.org/0009-0000-4763-9600

Zhang, Yingyu[2]
Correo: zyingyu23@gmail.com
Orcid: https://orcid.org/0009-0006-9948-0789

Liang, Jianzhong[3]
Correo: jianz-liang@hotmail.com
Orcid: https://orcid.org/0009-0004-2072-8856

Edilova, Mariam[4]
Correo: edilovamariam12@outlook.com
Orcid: https://orcid.org/0009-0002-9541-9156

Nusupov, Cholponbay[5]
Correo: n.cholponbay@hotmail.com
Orcid: https://orcid.org/0009-0008-6747-0206

DOI: https://doi.org/10.5281/zenodo.14983153

Abstract

This study examines moral boundaries, rights, and ethical responsibility in Artificial Intelligence (AI), focusing on ethical decision-making. Using a systematic analysis of scientific sources, legal documents, and real-world AI applications in medicine and justice, the research highlights significant issues of accountability. AI algorithms have shown bias, particularly in legal systems, where recidivism risk assessments disproportionately affect ethnic groups,

[1] Department of International Cooperation, Northwestern Polytechnical University, People's Republic of China.
[2] Department of International Cooperation, Northwestern Polytechnical University, People's Republic of China.
[3] Silk Road Institute, Jusup Balasagyn Kyrgyz National University, Kyrgyz Republic.
[4] Department of Philosophy, Theory and History of Culture, Jusup Balasagyn Kyrgyz National University, Kyrgyz Republic.
[5] Department of Philosophy, Theory and History of Culture, Jusup Balasagyn Kyrgyz National University, Kyrgyz Republic.

https://ojs.revistaclio.es/index.php/edicionesclio/
Recibido: 2025-01-05 **Aceptado**: 2025-02-24

creating legal uncertainty. Similar biases appear in medical diagnoses, affecting conditions like lung cancer and tuberculosis. The study confirms that AI lacks consciousness and free will, meaning responsibility must remain with developers or users. While legal frameworks regulate AI ethics, they do not fully address independent decision-making. The findings emphasize the need for improved transparency and accountability in AI regulation.

Keywords: social justice, control mechanisms, autonomy, algorithms.

Fronteras morales y consideración filosófica de la Inteligencia Artificial: exploración de la responsabilidad, los derechos y la toma de decisiones éticas

Resumen

Este estudio examina los límites morales, los derechos y la responsabilidad ética en la inteligencia artificial (IA), centrándose en la toma de decisiones éticas. Mediante un análisis sistemático de fuentes científicas, documentos legales y aplicaciones de IA en el mundo real en medicina y justicia, la investigación destaca importantes cuestiones de rendición de cuentas. Los algoritmos de IA han mostrado sesgos, en particular en los sistemas legales, donde las evaluaciones del riesgo de reincidencia afectan desproporcionadamente a los grupos étnicos, lo que crea incertidumbre jurídica. Sesgos similares aparecen en los diagnósticos médicos, que afectan a enfermedades como el cáncer de pulmón y la tuberculosis. El estudio confirma que la IA carece de conciencia y libre albedrío, lo que significa que la responsabilidad debe recaer en los desarrolladores o usuarios. Si bien los marcos legales regulan la ética de la IA, no abordan por completo la toma de decisiones independiente. Los hallazgos enfatizan la necesidad de mejorar la transparencia y la rendición de cuentas en la regulación de la IA.

Palabras clave: justicia social, mecanismos de control, autonomía, algoritmos.

Introduction

Artificial intelligence (AI) technology, as the main driving force of today's technological revolution and industrial transformation, is developing at an

unprecedented speed. The rapid development of artificial intelligence technology is manifested in the colossal social impact and changes they cause. Many social spheres, such as the economy, education, health care, transport and law, have begun a fundamental transformation thanks to the algorithm of artificial intelligence. The use of AI in these areas prompts scientists, legal scholars and philosophers to reconsider traditional ideas about the responsibility and morality of decisions, because the development of this technology has caused a number of ethical problems. They concern not only individual privacy and autonomy, but also social justice and the sharing of responsibilities. A thorough philosophical study of the moral dimension of AI technology has great theoretical and practical significance for today's society.

A key issue of modern time is the problem of responsibility of Artificial intelligence systems and the ethicality of the decisions they make (Shaituro et al., 2025; Kerimkhulle et al., 2023). Responsibility for the actions of AI systems must be clearly defined, and making ethical decisions with the participation of algorithms requires a reasoned approach (Coeckelbergh, 2019). The need to study such questions became obvious due to a number of factors. First, artificial intelligence systems are increasingly being used in socially important contexts, such as disease diagnosis, court decisions, or driving cars. However, research shows that AI often functions as a "black box" and the developers themselves cannot always explain why the system made a particular decision (Neri et al., 2020). This raises a number of issues related to ethical responsibility, including the difficulty of determining who is to blame for an error. Second, AI is capable of automating many work processes, which could lead to mass unemployment. The question arises about the social responsibility of corporations and states in the

context of the transformation of the labor market. Finally, AI can be used for malicious purposes, such as creating autonomous weapons systems, manipulating public opinion, or strengthening authoritarian control. These factors encourage researchers to reveal the ethical and legal nuances of using AI algorithms.

Floridi (2021) emphasized the importance of implementing ethical standards for AI technologies and introducing legislation that would regulate responsibility for the actions of such systems. In this context, the question of AI rights and the formation of an ethical framework for these rights also arises, since there have been no cases in human history of giving a machine rights and duties (Mandl et al., 2023). Melnyk and Lushch-Purii (2022) believe that the anthropocentric approach to technology, when the person remains the center of decision-making, should be preserved, since it is the person who creates and controls the technology. Blok (2023), in contrast, considered an approach to understanding technology where man is not the central figure controlling and using technology. The researcher proposed to consider technologies as independent agents that affect the world not only through people, but also independently of them.

Today, there are already numerous studies devoted to the moral aspects of artificial intelligence, and their relevance only grows every year. Ayling and Chapman (2021) examine the practical application of ethical frameworks for artificial intelligence, focusing on whether current tools and frameworks are sufficient to ensure fairness, transparency, accountability and ethical decision-making in artificial intelligence systems. Giubilini and Savulescu (2018), explored the possibility of creating an AI-based "moral consultant" that could make ethical decisions based on rules and algorithms. However, over time, this idea began to be subject to more and more criticism. In particular, Constantinescu et al. (2022)

pointed out that an artificial moral advisor (AMA) system cannot be qualified as morally responsible, and its use to remove responsibility from a person would be considered inferior, since AI does not possess consciousness or free will, which are necessary conditions for moral accountability.

However, despite some progress in developing theoretical frameworks for AI ethics, many questions remain unresolved. For example, the problem of preventing "algorithm bias", when AI systems, analyzing large volumes of data, including certain distortions or inaccuracies, makes decisions or makes predictions based on them, which often leads to unfair results (Daneshjou et al., 2021). Such cases continue to occur in judicial practice, where algorithms have shown bias against certain social groups (McKay, 2019). These questions require not only technical, but also deep philosophical consideration.

The purpose of this study was to answer these questions and explore the moral limits of AI responsibility and rights in the context of decision-making. The main focus is on the analysis of existing gaps in the scientific literature, as well as the discussion of possible approaches to solving these problems.

1. Materials and methods

The study was carried out during September 2024. Scientific sources, documents and legislative initiatives related to ethical and legal issues of Artificial Intelligence (AI) became the basis for the research. Special attention was paid to the analysis of moral boundaries and responsibility for the actions performed by AI, as well as discussions on the possibility of granting AI rights and participation in ethical decision-making.

Materials for the study were collected from peer-reviewed scientific databases such as Scopus, Springer and Google Scholar. The analyzed sources included scientific articles, monographs, declarations and legal acts, reports and analytical documents concerning the ethics of AI, legal aspects of its use, as well as philosophical works devoted to rights and responsibilities in the context of autonomous systems. The following keywords were used to search for relevant research materials: "AI ethics", "algorithm bias", "legal regulation of AI", "AI liability in judicial processes", "autonomous systems and accountability", "artificial moral advisor". The search covered scientific articles published in English from 2018 to 2024. This particular time period captures the most current developments and debates, ensuring that the research reflects the latest innovations and considerations in the field. In addition, documents that highlight the normative and legal regulation of AI were involved, in particular Ethics guidelines for trustworthy AI set up by the European Commission (Ethics guidelines for…, 2019), AI Principles (2019), Recommendation on the Ethics of Artificial Intelligence (2022), Artificial Intelligence Act (2024) and the General Data Protection Regulation (GDPR) (2018).

The research was conducted in accordance with PRISMA standards through a systematic analysis of these materials, including a review of contemporary philosophical and legal publications related to the ethics and responsibility of AI. Particular attention was paid to topics related to the impact of algorithmic systems on social processes, in particular the risks of automation of decision-making in areas such as medicine and law. On the basis of the received data, a comprehensive analysis of issues of ethical responsibility of AI and possible risks associated with the introduction of these systems in critical industries was conducted.

The criteria for including sources in the literature review were established: the sources had to be thematically related to the moral-ethical and legal dimension of Artificial Intelligence technology. Preference was given to scientifically significant, peer-reviewed works that were published in well-known scientific publishing houses. The screening resulted in 35 sources that met these criteria. The included sources were critically evaluated to determine their reliability and relevance.

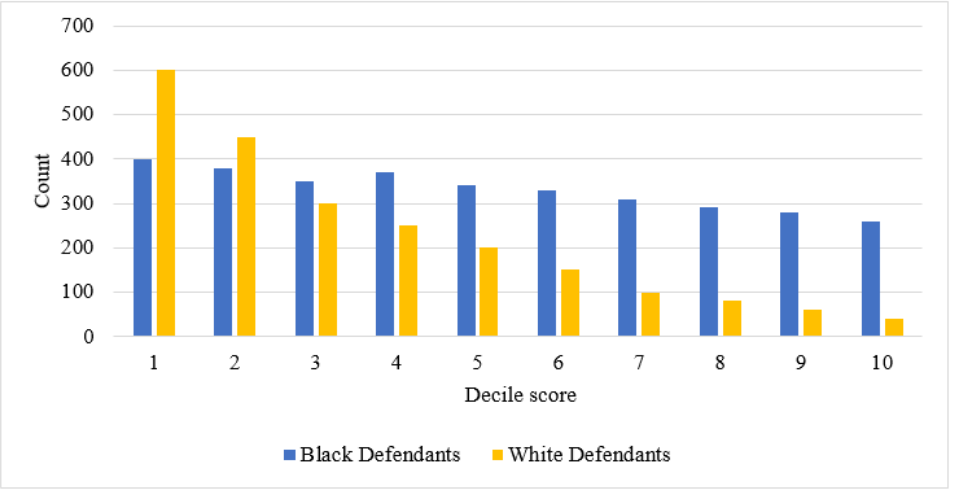
2. Results

2.1. Actions of Artificial Intelligence: legal and ethical boundaries

One of the key issues of the research was the study of the ethical and legal limits of responsibility for actions performed by artificial intelligence. During the analysis of the literature, several important points in this regard were revealed. Problem of prejustice and unpredictability creates legal uncertainty and calls for a revision of existing legal norms regarding liability (Carrillo, 2020). Bias in AI can arise for a variety of reasons, including the use of incomplete or unrepresentative data to train algorithms (Nassar & Kamal, 2021). For example, algorithms used in the judiciary and analyzing criminal data can display biased information, reinforcing existing stereotypes. AI systems such as Correctional Offender Management Profiling for Alternative Sanctions (COMPAS), which assess the risk of criminal recidivism, have shown significant bias in favor of certain ethnic groups. Figure 1 shows that the COMPAS Recidivism Risk Score (2016) shows a significant difference in scores for black and white defendants, an example of algorithmic bias and opacity. Based on this histogram, the question of legal responsibility of algorithm developers arises. If artificial intelligence

systematically detects prejudice against a certain ethnic group, the problem of liability for wrong decisions arises – it will rest with the developer of the system, the company that used it, or perhaps with the state itself that introduced artificial intelligence into its legal practice.

Figure 1. COMPAS risk of recidivism among black and white defendants



Source: Compiled by the authors based on Larson et al. (2016)

The biggest risk is that such prejudices, if not detected and corrected in time, can exacerbate already existing social inequality and lead to fatal errors, whether in judicial decisions or in medicine. Table 1 provides a vivid example of how different populations may suffer differently from AI bias errors, leading to unfair or even harmful medical decisions. The table shows the results of using AI in radiological diagnostics with statistical data on system errors that correlate with race. The impact of biases in the real-world medical screening scenarios of TB screening among Australian visa applicants and lung cancer screening in Singapore cannot be attributed to statistical error given the gap between the rates.

Table 1. AI errors in medical screening

Scenario	Population group	Type of error	Number of errors	Sensitivity/Frequency of errors
Tuberculosis screening (visas to Australia)	India	False positives (FPR)	16,500	Higher error rate
Tuberculosis screening (visas to Australia)	China	False positives (FPR)	5,200	Lower error rate
Lung cancer screening (Singapore)	Malaysia	False negatives (FNR)	116	61.25% sensitivity
Lung cancer screening (Singapore)	Chinese	False negatives (FNR)	31	98% sensitivity

Source: Compiled by the authors based on Venugopal et al. (2023)

In the TB example, when using the AI tool to screen among Australian visa applicants, the model shows an FPR of 16,500 false positives for Indian applicants. This is significantly higher than for Chinese applicants (5,200 false positives), despite India having twice the prevalence of TB but fewer applicants. In the lung cancer screening scenario in Singapore, AI has an FNR for the Malay population of 116 missed cancer cases (61.25% sensitivity), which is significantly worse than that for the Chinese population (31 missed cases at 98% sensitivity). This shows the significant bias of AI towards different ethnic groups. Radiology accounts for 40.4% of all research in the field of medical AI, and that is why the importance of AI regulation in order to reduce false conclusions in such a large field of medicine is extremely acute. Using AI to diagnose or choose treatment poses new ethical challenges for doctors and patients (Braun et al., 2021; Neri et al., 2020). Algorithms used to make healthcare decisions can analyze vast amounts of data

and suggest treatment options, but they can be wrong or reflect biases present in the raw data (Naik et al., 2022).

The problem of bias and responsibility for the actions of AI in the judicial and medical system stems mainly from the lack of transparency of algorithms and their explainability. In practice, this means that people who work in these areas cannot know exactly what data the algorithm's decision is based on, which creates legal uncertainty and threatens the principle of a fair trial (Osasona et al., 2024). To solve this problem, there is an urgent need to develop new ethical and legal approaches to AI design, as well as stricter control by the state and international organizations. Technical solutions such as "explainable AI" (XAI), which allows users to understand the decision-making processes of algorithms, can partially remove this issue, but it remains acutely relevant (Yang et al., 2023). In general, the autonomy of AI systems with their unpredictability is compared to a kind of concept of a "moral zombie", when systems can act like people, but do not have consciousness or the ability to make moral choices (Véliz, 2021). This means that while AI systems can influence the world, they cannot bear moral responsibility for their actions. In such case there is no chance for AMA to take responsibility as well. Autonomy associated with moral responsibility requires consciousness and the ability to feel emotions such as pain, compassion or remorse, which is currently impossible for AI (Miernicki & Ng, 2021). Therefore, an AI that lacks the ability to be a moral agent must have a supervisor who is morally and legally responsible for the system's actions.

It is important to note that the process of developing legislation regulating the use of AI is in an active stage. Over the past 6 years, a number of legal instruments have been created to regulate AI, in particular, Ethics guidelines for

trustworthy AI set up by the European Commission (Ethics guidelines for…, 2019), AI Principles (2019), Recommendation on the Ethics of Artificial Intelligence (2022), Artificial Intelligence Act (2024) and the General Data Protection Regulation (GDPR) (2018). The Artificial Intelligence Act (2024), for example, provided limits on the autonomy of AI systems and imposed liability on the users of these systems in cases where they caused harm. The Ethics Guidelines for Trustworthy AI (2019) created a framework for the development and use of AI that prioritized ethical considerations. The guidelines revolved around three essential components:

- Lawfulness: ensuring AI adhered to existing laws and regulations.
- Ethics: aligning AI development with fundamental ethical principles, including respect for human autonomy, prevention of harm, fairness, and transparency.
- Robustness: AI systems have to be technically robust and secure, minimizing harm caused by technical errors.

The role of these guidelines was to emphasize accountability, meaning that AI systems had to be auditable, explainable, and subject to human oversight (Hagendorff, 2020). This raised legal questions about responsibility when AI failed, particularly regarding liability and the balance between human control and autonomous systems. The Organisation for Economic Co-operation and Development (Principles on AI, 2019) also released a set of principles aimed at promoting the responsible stewardship of trustworthy AI. The Organisation for Economic Co-operation and Development (OECD's) principles reflected a concern for the ethical boundaries of AI by reinforcing the need for transparency, fairness, and inclusivity. They also addressed legal questions regarding the liability of AI systems, especially in cases where AI was used in public

governance, such as the criminal justice system. Recommendation on the Ethics of Artificial Intelligence (2022) are more specific on emphasizing fairness, transparency, and the need to respect international human rights. In legal terms, the United Nations Educational, Scientific and Cultural Organization (UNESCO) recommendation addresses the global implications of AI, including its cross-border legal challenges, privacy concerns, and the regulation of biased or harmful AI applications. The GDPR (2018) is the EU's cornerstone regulation for data privacy and protection has the strongest implications for AI development, especially in areas of data protection, consent and liability for data misuse. The GDPR places strict legal limits on how AI can process personal data, including accountability requirements for organizations that deploy AI systems. This framework is critical for maintaining trust in AI systems that handle sensitive personal data, especially in fields like healthcare and finance.

Each of these documents addresses both ethical and legal boundaries for the development and deployment of AI. They highlight the importance of fairness, transparency, accountability, and respect for human rights while also proposing legal mechanisms to manage risks and potential harms caused by AI systems (Rodrigues, 2020). However, such measures are insufficient to cover all possible scenarios, especially in cases where the algorithm makes autonomous decisions without direct human control.

In addition to European and Western approaches in general, to the ethical and legal limitations of AI, there is a separate dimension of philosophical considerations in Asia, particularly in China and Kyrgyzstan. In China, the development of AI takes place under the strong influence of government policy, which actively stimulates the research and implementation of AI in various

spheres of economy and society. The Chinese philosophy of AI is largely based on collectivist values, where technology is aimed at the public good. This also applies to ethical issues of AI, such as ensuring state control over data and artificial intelligence systems, as well as protecting society from possible undesirable consequences of technology. Kurmangali et al. (2024) note that in China the issue of ethical responsibility of AI is closely related to the state's need to maintain social stability and security. According to Younas and Zeng (2024), ethical issues such as AI decision-making and rights are also explored through the lens of Chinese philosophy and legal norms. China is gradually developing a legal framework to protect human rights in the age of AI, but the focus is on security and stability, which may raise debates about individual rights and privacy.

Kyrgyzstan, although in the early stages of AI implementation, is making significant strides in the development of this technology and its implementation at various levels. This creates even more challenges, as the legislative framework in the field of artificial intelligence regulation remains uninitiated. The lack of clear norms and standards regarding responsibility for the use of AI complicates the process of its implementation and control over its action (Alahmad, 2025; Apakhayev et al., 2017). For example, issues related to possible discriminatory decisions made by AI algorithms remain unaddressed, putting social justice and citizens' rights at risk

Despite these challenges, the Kyrgyz government is trying to develop digital strategies aimed at integrating the country into the global technology space. In particular, there is investment in the development of digital skills, increasing the transparency of technologies and creating a legislative framework that will ensure the ethical use of AI at the national level (Kurmangali et al., 2024). This is an

important step towards reducing the digital divide, increasing the level of trust in digital technologies among the population, and establishing not only a legal but also an ethical framework.

The results of this study demonstrate that the legal framework is yet to catch up with the technological progress in the field of AI, especially when it comes to autonomous systems that can independently make decisions in critical areas such as medicine, justice or transport management. AI algorithms are already involved in solving tasks that have legal or ethical implications, but despite them, a clear legal mechanism for determining responsibility remains an open question. If over time AI systems achieve a high level of autonomy, there will be a need for new legal and ethical standards to determine responsibility for their actions. This is especially true for autonomous vehicles or healthcare decision-making systems where human control is minimized. The necessary steps for legal regulation of AI actions are, first, the need to develop new transparency standards for algorithmic systems that make critical decisions that affect people's rights. This may include mandatory implementation of explainability and verification mechanisms for AI decisions. Second, it is important that in each use case of AI, it is clearly defined who will be responsible for its decisions, especially in areas where serious consequences for people are possible.

2.2. Impact of AI on social processes

The impact of AI on social processes is becoming increasingly felt in various fields, including the economy, the labor market, politics, and interpersonal communication. The rapid development of AI opens up new opportunities for humanity, but at the same time challenges ethics, privacy and social equality (Tai, 2020). It is important to understand exactly how artificial intelligence changes the

main social processes, what consequences it can have for society, and what challenges the modern world faces.

Artificial intelligence is not just a tool that makes routine tasks easier (Rexhepi et al., 2024). It is a technology that imitates human thinking and is capable of making decisions based on the processing of large volumes of data. In the process of its development, AI becomes more and more autonomous, which allows it to take over complex processes in various fields, starting from industry and ending with the management of state structures (Apakhayev et al., 2024). In turn, in addition to the fact that this creates ethical and legal misunderstandings, it also changes the structure of work and economic relations, not always to the benefit of a person.

In the labor market, automation caused by the development of AI is becoming more and more visible. Machines are able to perform complex tasks, which allows to increase the efficiency of many production and service processes (Kolbayev et al., 2024). In manufacturing giants such as the US corporation Amazon, automated systems are replacing workers in warehouses, performing the functions of sorting and packing goods (Tschang & Almirall, 2021). This leads to fewer jobs for people, especially in sectors that do not require advanced expertise. Table 2 shows the percentage risk of job loss due to AI in the United States, India, China, and Ethiopia.

Table 2. AI job loss risks by country and sector

Country	Percentage of jobs at risk due to ai and automation	Main sectors at risk
USA	47%	Manufacturing, mid-skilled jobs
India	69%	Manufacturing, services, low-skilled jobs
China	77%	Light industry, manufacturing
Ethiopia	85%	Agriculture, industry

Source: Compiled by the authors based on Ernst et al. (2019).

The most vulnerable are workers in areas where routine tasks are performed, such as manufacturing, transport, agriculture and logistics. One example is the use of autonomous vehicles that can replace drivers in the transportation industry. This causes serious social problems, as workers in these sectors may find themselves out of work, and unemployment is one of the most important problems in modern society.

At the same time, it is worth noting that the development of AI creates new opportunities for employment. For example, specialists in programming, data processing and machine learning have become extremely sought after in the labor market. Highly qualified personnel have great career growth prospects, as industries need experts to develop, debug and maintain artificial intelligence infrastructure. In addition, new technologies are driving R&D-related industries such as robotics, automation, and data analytics.

However, the social inequality associated with the automation of work is a serious problem. The introduction of AI may lead to a deepening of the gap between the rich and the poor (Tkachenko et al., 2024). Those with access to

modern technology and higher education may gain an advantage, while the less skilled risk being left on the sidelines of the economy. This can create social tension, especially in times of economic instability. To solve this problem, it is necessary to create programs for retraining workers and provide access to education for those who need it.

Artificial intelligence also has a significant impact on political processes. The use of big data and algorithms to analyze political sentiment and predict elections has become a new tool in political campaigns. Algorithms can analyze the behavior of voters, their social and economic needs, which allows political forces to create personalized messages aimed at specific groups of the population (Kullolli, 2024). On the one hand, this increases the effectiveness of political campaigns, as politicians can better understand the expectations of voters and adapt their strategies to these needs. However, on the other hand, new ethical issues arise. Artificial intelligence can be used to manipulate public opinion through the creation and distribution of fake news or targeted political ads. Social networks such as Facebook and Twitter have already become platforms for the dissemination of political disinformation, which affects electoral processes in various countries around the world. The use of AI to analyze data and create political messages can be a useful tool, but at the same time it threatens democratic values if not properly controlled (Vilks & Kipāne, 2018). In particular, one of the most prominent examples of the use of AI in politics is the Cambridge Analytica scandal, when in 2018 it was revealed that Cambridge Analytica illegally collected the data of approximately 87 million Facebook users to create personalized political ads to influence voters during the US presidential election 2016 (Hinds et al., 2020). This caused a massive wave of criticism about the ethics of using AI

in politics and called into question the transparency of electoral processes. It is important that governments continue to improve the legal framework to control the use of AI in political campaigns to ensure ethical standards and prevent the manipulation of public opinion.

Finally, an equally important area that has undergone significant changes under the influence of AI is interpersonal communication. AI is increasingly entering people's daily lives through chatbots, virtual assistants and automated service systems (Tkachenko et al., 2024). Today's technology allows people to interact with machines in the same way they interact with other people (Yermolenko et al., 2024; Khoda et al., 2024). For example, voice assistants like Siri have become a familiar tool for many users who use them to search for information, control devices, or perform routine tasks. However, such automation can have negative consequences for the quality of interpersonal communication. People are increasingly turning to technology to solve their problems, replacing live communication with other people. This can lead to a decline in social interaction as technology begins to play an increasingly important role in daily lives. In the field of customer service, automated systems are increasingly used to resolve inquiries, which allows for fast service delivery, but reduces the amount of real human contact (Iklassova et al., 2024; Palko et al., 2023).

In addition, the use of AI for communication can have psychological consequences, especially for people who suffer from loneliness or social isolation. Virtual assistants and chatbots can create the illusion of communication, which is not always a healthy approach to solving social problems (Kenesbayev et al., 2017; Altynbekova et al., 2024). For example, in Japan there is a practice of using companion robots to support elderly people who live alone (Fraune et al., 2022)

Although these technologies can provide some level of emotional support, they cannot completely replace human communication, which is an important part of social life.

Thus, the impact of AI on social processes is multifaceted and ambiguous. On the one hand, artificial intelligence opens up new opportunities for us to develop the economy, improve productivity and simplify many processes. On the other hand, it poses serious challenges to society related to inequality, ethics and the quality of interpersonal communication.

To successfully adapt to the rapid development of AI, society must take measures at various levels – from state programs for retraining workers to regulating the use of AI in political processes. Only a comprehensive approach that takes into account both the opportunities and risks of new technologies will allow us to maintain a balance between technological progress and social needs.

3. Discussion

The discussion of the moral borders and philosophical considerations of Artificial Intelligence must engage with both the ethical frameworks and the real-world implications of AI systems, particularly concerning responsibility, rights, and ethical decision-making. The findings of this study, while providing significant insights into the current state of AI ethics and governance, must be contextualized within the broader scholarly discourse on these topics, as well as compared with existing philosophical positions and frameworks.

A recurring theme in discussions about AI is the issue of responsibility. Scholars like Floridi (2021) emphasize the necessity of clear accountability mechanisms within AI systems, particularly as these technologies become more

integrated into critical societal functions. This research confirms Floridi's assertion that ethical standards are paramount in ensuring that AI systems operate within moral boundaries, especially as they gain autonomy in decision-making processes. However, while L. Floridi supports legislation as a primary means of enforcing responsibility, research findings suggest that legal frameworks alone are insufficient. This is due to the unpredictability and opacity of AI systems, a notion supported by Neri et al. (2020), who argue that AI's "black box" nature presents significant challenges to accountability. Research aligns with E. Neri et al.'s concerns, particularly regarding the limitations of explainability in current AI systems. Even with regulatory frameworks in place, AI's inherent complexity makes it difficult to attribute responsibility to a specific actor – whether it be the developer, the deploying entity, or the AI system itself.

This ambiguity in responsibility is further compounded by AI's potential for bias, an issue well-documented in both legal and medical fields. As study shows, algorithms used in judicial systems, such as the COMPAS recidivism tool, exhibit biases that disproportionately affect marginalized groups, particularly people of color. These findings echo those of R. Daneshjou et al. (2021), who highlight the lack of transparency and the embedded biases within AI datasets. Results of the research corroborate R. Daneshjou's argument that biased AI tools exacerbate existing social inequalities. However, research goes beyond merely identifying bias by emphasizing the need for interdisciplinary approaches that integrate ethical principles with technical innovations, such as explainable AI (XAI). Although XAI has been proposed as a solution to the opacity problem, scholars like Yang (2023) caution that while XAI may increase transparency, it does not fully resolve the deeper ethical concerns of bias and fairness. Findings of this study support this

cautionary stance, demonstrating that transparency alone does not guarantee fairness, particularly if the underlying data remains flawed.

Moreover, the ethical dilemma surrounding AI's decision-making abilities extends to the concept of AI rights and moral agency. Some scholars, such as Giubilini and Savulescu (2018), have explored the possibility of AI systems serving as "moral advisors" capable of making ethical decisions. However, this research, in line with the critique of Constantinescu et al. (2022), argues that AI systems cannot be considered morally responsible agents. As Constantinescu et al. points out, AI lacks the consciousness and free will necessary for moral accountability, and this position affirmed through analysis in this scientific work. While AI systems may simulate human decision-making processes, they do so without the emotional or moral depth that defines true ethical agency. This is particularly important in the context of critical decision-making in fields such as healthcare, where AI's recommendations can have life-altering consequences. Without the capacity for empathy or moral reasoning, AI's involvement in such decisions raises significant ethical concerns about the displacement of human judgment.

The implications of AI's limited moral agency are also evident in the ongoing debate about granting rights to AI systems. While the notion of AI rights is still largely speculative, it raises important questions about the intersection of ethics, law, and technology. Research supports the view of Melnyk and Lushch-Purii (2022), who argue for an anthropocentric approach to AI ethics, whereby humans remain the central figures in decision-making processes. This approach ensures that human dignity and autonomy are preserved, even as AI becomes more autonomous. However, Blok (2023) challenges this anthropocentric view by

proposing that technology should be seen as an independent agent that can affect the world beyond human control. While Blok's perspective offers a thought-provoking challenge to traditional ethical frameworks, research findings suggest that such a shift may be premature. Given AI's current limitations, particularly in terms of moral reasoning and responsibility, it would be ethically precarious to grant AI systems rights or consider them independent moral agents.

The findings of this study also revealed marked differences in how artificial intelligence is integrated into different political and cultural contexts, with China and Kyrgyzstan offering particularly insightful case studies. As Younas and Zeng (2024) point out, China's collectivist values shape an ethical approach to artificial intelligence, prioritizing public good over individual rights. This study is consistent with their findings, particularly highlighting the tension between governmental advances in AI and concerns about privacy and individual liberties. However, while Younas and Zeng suggest that China's focus on the collective good is ethically justified, the findings of this study raise critical questions about possible trade-offs, especially when state-controlled AI systems are used to monitor and suppress dissent. This suggests that China's approach, while effective in achieving social stability goals, may overlook important ethical considerations regarding personal autonomy and data privacy.

Kyrgyzstan, being in the early stages of AI adoption, faces unique challenges due to a weak regulatory framework and limited technological infrastructure. Kurmangali et al. (2024) think that Kyrgyzstan's efforts to integrate artificial intelligence have been hampered by a lack of clear legal and ethical principles, making the country vulnerable to the risks of unregulated AI implementation. This study is consistent with Kurmangali's findings, specifically

identifying the lack of robust legislative oversight as a major barrier to the ethical use of AI in Kyrgyzstan.

Another critical aspect of research is the impact of AI on social processes, particularly in the labor market and political sphere. AI-driven automation, as Ernst et al. (2019) discusses, poses significant risks to employment, especially in sectors reliant on low- and mid-skilled labor. Findings in this work highlight similar concerns, particularly in the context of AI's potential to exacerbate social inequalities. While AI creates new opportunities in fields such as data science and machine learning, it also threatens to widen the gap between those with access to advanced education and those without (Titova et al., 2021; Zaitseva et al., 2023). This aligns with the concerns raised by Castillo et al. (2021), who examine the "dark side" of AI-powered interactions, particularly the ways in which AI can contribute to economic and social disparities. Research echoes Castillo et al.'s concerns, emphasizing the need for policies that address the unequal distribution of AI's benefits and burdens.

In the political realm, the use of AI to influence public opinion and electoral outcomes raises profound ethical questions (Xhafka et al., 2024). The Cambridge Analytica scandal, as documented by Hinds et al. (2020), is a stark example of how AI can be used to manipulate voter behavior through targeted political advertising. Findings of research support the view that AI's role in political processes must be carefully regulated to prevent the erosion of democratic values. This perspective is reinforced by scholars like Campolo and Crawford (2020), who argue that AI's ability to wield power without responsibility is a dangerous trend that threatens the integrity of democratic systems. While AI can enhance political

campaign strategies, it must be balanced with ethical considerations that safeguard against the misuse of personal data and the manipulation of public opinion.

Finally, this research touches on the psychological and social consequences of AI's integration into everyday life, particularly in the realm of interpersonal communication. As Véliz (2021) points out, AI systems, though capable of mimicking human interactions, lack the moral and emotional depth necessary for meaningful social relationships. Results align with this view, particularly in the context of the growing use of AI-powered virtual assistants and chatbots. While these technologies offer convenience, they also risk diminishing the quality of human interactions by replacing face-to-face communication with automated responses. This has significant implications for social cohesion and individual well-being, especially for vulnerable populations such as the elderly or socially isolated individuals.

In conclusion, study contributes to the ongoing discourse on AI ethics by highlighting the complexities of responsibility, rights, and ethical decision-making in AI systems. While there is growing recognition of the need for robust ethical and legal frameworks to govern AI, and research findings suggest that current approaches may not be sufficient to address the full spectrum of challenges posed by AI. As AI continues to evolve, it is essential to develop interdisciplinary strategies that integrate technical innovations with ethical principles, ensuring that AI serves the broader goal of promoting social justice, fairness, and human dignity.

Conclusions

As a result of the analysis of the literature and legal framework, several key aspects were highlighted. The main problem remains the definition of responsibility in AI systems, overcoming algorithmic bias and determining the potential of granting AI rights and participation in ethical decision-making.

The study confirms that while modern AI systems have a high level of autonomy and the ability to process large amounts of data, they remain limited in their ability to act with moral responsibility. This issue is particularly relevant in critical fields such as medicine and justice, where biased or opaque decisions can have serious consequences for people. From a practical point of view, the study found that existing legal frameworks, although quite thorough, are often not able to cover all aspects of the problems that arise in the context of AI development. Existing guidelines provide a solid foundation for the ethical implementation of AI. However, the unpredictability of such systems requires more stringent measures, especially regarding the concepts of explainability and transparency.

One of the most important conclusions of this study is the need to maintain an anthropocentric approach to AI ethics. AI systems that lack consciousness, free will, and the ability to reason morally cannot be recognized as moral agents. Therefore, the ethical and legal responsibility for the actions of AI should remain with the person – the operator or developer. The anthropocentric model, in which humans retain ultimate control over AI systems, is the most responsible.

This study is not without limitations. The theoretical part is mostly based on existing literary sources and legal norms, which may not fully take into account the rapid changes in the field of AI. Although the study addresses key

philosophical and ethical aspects, it does not provide empirical data on real-world examples of AI applications that could provide a deeper understanding of practical challenges. Future research could be enriched by empirical analysis of the impact of AI in critical areas such as health and justice.

Overall, this study makes a significant contribution to the discourse on AI ethics by highlighting the complexity of issues of responsibility, rights, and ethical decision-making. Despite the fact that the need to strengthen the legal and ethical framework for the regulation of AI is recognized, the results of the study indicate that current approaches may not be sufficient to solve all the challenges facing society in connection with the development of these technologies. With the further development of AI, it is necessary to develop interdisciplinary strategies that will ensure the harmonization of technical innovation with ethical principles, while preserving justice, social equality and human dignity.

References

AI Principles. (2019). https://www.oecd.org/en/topics/sub-issues/ai-principles.html

Alahmad, A. K. (2025). Criminal Liability for Cyberbullying in Jordanian Legislation. *Review of Law and Social Sciences*, 3 (1), 99-111. https://doi.org/10.71261/rlss/3.1.99.11

Altynbekova, Z., Bostanov, B., Kenesbayev, S., Ongarbayeva, M., & Sadirmekova, Z. (2024). Methodology of teaching future computer science teachers to create and use open educational resources. *Scientific Herald of Uzhhorod University. Series Physics*, (55), 2337-2347. https://doi.org/10.54919/physics/55.2024.233cu7

Apakhayev, N., Adilova, K., Bugybay, D., Mukaldyeva, G., Mukhamadiyeva, G.N., & Koshpenbetov, B.M. (2017). Childhood legal protection in Kazakhstan. *Journal of Advanced Research in Law and Economics*, 8 (3), 714-721. https://doi.org/10.14505/jarle.v8.3(25).03

Apakhayev, N., Adilova, K., Bugybay, D., Toktybaev, A., & Kopbayev, D. (2024). The problem of protecting the rights and legitimate interests of the child in the family and outside it. *Danube*, 15 (3), 221-236. https://doi.org/10.2478/danb-2024-0013

Artificial Intelligence Act. (2024). https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/698792/EPRS_BRI(2021)698792_EN.pdf

Ayling, J., & Chapman, A. (2021). Putting AI Ethics to Work: are the Tools Fit for Purpose? *AI and Ethics,* 2 (03), 405-429. https://doi.org/10.1007/s43681-021-00084-x

Blok, V. (2023). The Ontology of Technology Beyond Anthropocentrism and Determinism: The Role of Technologies in the Constitution of the (Post) Anthropocene World. *Foundations of Science*, 28 (03), 987-1005. https://doi.org/10.1007/s10699-022-09829-1

Braun, M., Hummel, P., Beck, S., & Dabrock, P. (2021). Primer on an Ethics of AI-based Decision Support Systems in the Clinic. *Journal of Medical Ethics*, 47 (12), e3. https://doi.org/10.1136/medethics-2019-105860

Campolo, A., & Crawford, K. (2020). Enchanted Determinism: Power without Responsibility in Artificial Intelligence. *Engaging Science Technology and Society*, 6, 1-19. https://doi.org/10.17351/ests2020.277

Carrillo, M.R. (2020). Artificial Intelligence: From Ethics to Law. *Telecommunications Policy*, 44 (06), 101937. https://doi.org/10.1016/j.telpol.2020.101937

Castillo, D., Canhoto, A.I., & Said, E. (2021). The Dark Side of AI-Powered Service Interactions: Exploring the Process of Co-Destruction from the Customer Perspective. *Service Industries Journal*, 41 (13-14), 900-925. https://doi.org/10.1080/02642069.2020.1787993

Coeckelbergh, M. (2019). Artificial Intelligence, Responsibility Attribution, and a Relational Justification of Explainability. *Science and Engineering Ethics*, 26 (04), 2051-2068. https://doi.org/10.1007/s11948-019-00146-8

Constantinescu, M., Vică, C., Uszkai, R., & Voinea, C. (2022). Blame it on the AI? On the Moral Responsibility of Artificial Moral Advisors. *Philosophy & Technology*, 35, 35. http://dx.doi.org/10.1007/s13347-022-00529-z

Daneshjou, R., Smith, M.P., Sun, M.D., Rotemberg, V., & Zou, J. (2021). Lack of Transparency and Potential Bias in Artificial Intelligence Data Sets and Algorithms: A Scoping Review. *JAMA Dermatology*, 157 (11), 1362-1369. https://doi.org/10.1001/jamadermatol.2021.3129

Ernst, E., Merola, R., & Samaan, D. (2019). Economics of Artificial Intelligence: Implications for the Future of Work. *IZA Journal of Labor Policy*, 9 (01), 4. https://doi.org/10.2478/izajolp-2019-0004

Ethics guidelines for trustworthy AI. (2019). https://ec.europa.eu/futurium/en/ai-alliance-consultation.1.html

Floridi, L. (2021). The European Legislation on AI: A Brief Analysis of its Philosophical Approach. *Philosophy & Technology*, 34 (02), 215-222. https://doi.org/10.1007/s13347-021-00460-9

Fraune, M.R., Komatsu, T., Preusse, H.R., Langlois, D.K., Au, R.H., Ling, K., Suda, S., Nakamura, K., & Tsui, K.M. (2022). Socially Facilitative Robots for Older Adults to Alleviate Social Isolation: A Participatory Design Workshop Approach in the US and Japan. *Frontiers in Psychology*, 13, 904019. https://doi.org/10.3389/fpsyg.2022.904019

General Data Protection Regulation (GDPR). (2018). https://www.consilium.europa.eu/en/policies/data-protection/data-protection-regulation/

Giubilini, A., & Savulescu, J. (2018). The Artificial Moral Advisor. The "Ideal Observer" Meets Artificial Intelligence. *Philosophy & Technology*, 31 (02), 169-188. https://doi.org/10.1007/s13347-017-0285-z

Hagendorff, T. (2020). The Ethics of AI Ethics: An Evaluation of Guidelines. *Minds and Machines*, 30 (01), 99-120. https://doi.org/10.1007/s11023-020-09517-8

Hinds, J., Williams, E.J., & Joinson, A.N. (2020). "It wouldn't Happen to Me": Privacy Concerns and Perspectives Following the Cambridge Analytica Scandal. *International Journal of Human-Computer Studies*, 143, 102498. https://doi.org/10.1016/j.ijhcs.2020.102498

Iklassova, K., Aitymova, A., Kopnova, O., Shaporeva, A., Abildinova, G., Nurbekova, Z., Almagambetova, L., Gorokhov, A., & Aitymov, Z. (2024). Ontology modeling for automation of questionnaire data processing. *Eastern-European Journal of Enterprise Technologies*, 5 (2-131), 36-52. https://doi.org/10.15587/1729-4061.2024.314129

Kenesbayev, S.M., Oralbekova, A.K., Sartayeva, N.T., & Zhailauova, M.K. (2017). Programme and summary of research work on ICT competence development for future elementary school teachers in the conditions of inclusive education. *Espacios*, 38 (25), 10. https://www.revistaespacios.com/a17v38n25/17382510.html

Kerimkhulle, S., Dildebayeva, Z., Tokhmetov, A., Amirova, A., Tussupov, J., Makhazhanova, U., Adalbek, A., Taberkhan, R., Zakirova, A., & Salykbayeva, A. (2023). Fuzzy Logic and Its Application in the Assessment of Information Security Risk of Industrial Internet of Things. *Symmetry*, 15 (10), 1958. https://doi.org/10.3390/sym15101958

Khoda, V., Leshchuk, N., Topalov, A., Robotko, S., Klymenko, O., & Nekrasov, S. (2024). Computerized Lathe Control System based on Internet of Things Technology. In *Proceedings - International Conference on Advanced Computer Information Technologies, ACIT* (pp. 674-677). Institute of Electrical and Electronics Engineers. https://doi.org/10.1109/ACIT62333.2024.10712548

Kolbayev, N., Tuyenbayeva, K., Seitimbetova, D., & Apakhayev, N. (2024). Methods of Modelling Electronic Academic Libraries: Technological Concept of Electronic Libraries. *Preservation, Digital Technology and Culture*, 53 (2), 81-90. https://doi.org/10.1515/pdtc-2024-0001

Kullolli, B. (2024). Hacker Attacks on Electronic Election and Vote Counting Systems: Estimation of Damages and Methods of Protection. *Pakistan Journal of Criminology*, 16 (3), 31-44. https://doi.org/10.62271/pjc.16.3.31.44

Kurmangali, M., Yeraliyeva, Y., & Beimisheva, A. (2023). Digitalization and Artificial Intelligence in Central Asia: Governmental Responses and Further Implications. *Public Policy and Administration*, 23 (02), 146-159. https://doi.org/10.13165/VPA-24-23-2-03

Larson, J., Mattu, S., Kirchner L., & Angwin, J. (2016). How We Analyzed the COMPAS Recidivism Algorithm. *ProPublica*. https://www.propublica.org/article/how-we-analyzed-the-compas-recidivism-algorithm

Mandl, S., Kobert, M., Bretschneider, M., Asbrock, F., Meyer, B., Strobel, A., & Süße, T. (2023). Exploring Key Categories of Social Perception and Moral Responsibility of AI-Based Agents at Work: Findings from a Case Study in an Industrial Setting. In A. Schmidt, K. Väänänen, Tesh Goyal, P.O. Kristensson, A. Peters (Eds.), *CHI'23: CHI Conference on Human Factors in Computing Systems* (pp. 1-6). Association for Computing Machinery. https://doi.org/10.1145/3544549.3585906

McKay, C. (2019). Predicting Risk in Criminal Procedure: Actuarial Tools, Algorithms, AI and Judicial Decision-Making. *Current Issues in Criminal Justice*, 32 (01), 22-39. https://doi.org/10.1080/10345329.2019.1658694

Melnyk, V.P., & Lushch-Purii, U.I. (2022). Revising Anthropocentrism of Technics in the Light of the 21st Century New Anthropological Models. *Anthropological Measurements of Philosophical Research*, 21, 72-83. https://doi.org/10.15802/ampr.v0i21.260334

Miernicki, M., & Ng, I. (2021). Artificial Intelligence and Moral Rights. *AI & Society*, 36 (01), 319-329. https://doi.org/10.1007/s00146-020-01027-6

Munn, L. (2023). The Uselessness of AI Ethics. *AI Ethics*, 3, 869-877. https://doi.org/10.1007/s43681-022-00209-w

Naik, N., Hameed, B.Z., Shetty, D.K., Swain, D., Shah, M., Paul, R., Aggarwal, K., Ibrahim, S., Patil, V., Smriti, K., Shetty, S., Rai, B.P., Chlosta, P., & Somani, B.K. (2022). Legal and Ethical Consideration in Artificial Intelligence in Healthcare: Who Takes Responsibility? *Frontiers in Surgery*, 9, 862322. https://doi.org/10.3389/fsurg.2022.862322

Nassar, A., & Kamal, M. (2021). Ethical Dilemmas in AI-Powered Decision-Making: A Deep Dive into Big Data-Driven Ethical Considerations. *International Journal of Responsible Artificial Intelligence*, 11 (08), 1-11.

Neri, E., Coppola, F., Miele, V., Bibbolino, C., Grassi, R. 2020. Artificial Intelligence: Who is Responsible for the Diagnosis? *La Radiologia Medica*, 125 (06), 517-521. https://doi.org/10.1007/s11547-020-01135-9

Osasona, F., Amoo, O.O., Atadoga, A., Abrahams, T.O., Farayola, O.A., & Ayinla, B.S. (2024). Reviewing the Ethical Implications of AI in Decision Making Processes. *International Journal of Management & Entrepreneurship Research*, 6 (02), 322-335. https://doi.org/10.51594/ijmer.v6i2.773

Palko, D., Babenko, T., Bigdan, A., Kiktev, N., Hutsol, T., Kuboń, M., Hnatiienko, H., Tabor, S., Gorbovy, O., & Borusiewicz, A. (2023). Cyber Security Risk Modeling in Distributed Information Systems. *Applied Sciences (Switzerland)*, 13 (4), 2393. https://doi.org/10.3390/app13042393

Recommendation on the Ethics of Artificial Intelligence. (2022). https://www.unesco.org/en/artificial-intelligence/recommendation-ethics

Rexhepi, F.G., Breznica, R.K., & Rexhepi, B.R. (2024). Evaluating the Effectiveness of Using Digital Technologies in Music Education. *Journal of Educational Technology Development and Exchange*, 17 (1), 273-289. https://doi.org/10.18785/jetde.1701.16

Rodrigues, R. (2020). Legal and Human Rights Issues of AI: Gaps, Challenges and Vulnerabilities. *Journal of Responsible Technology*, 4, 100005. https://doi.org/10.1016/j.jrt.2020.100005

Shaituro, O., Holodnyk, Y., Pevko, S., & Khan, O. (2025). Legal awareness as a factor in preventing illegal (deviant) behavior. *Dialogues in Humanities and Social Sciences*, 3 (1), 09-16. https://doi.org/10.71261/dhss/3.1.9.16

Tai, M.C. (2020). The Impact of Artificial Intelligence on Human Society and Bioethics. *Tzu Chi Medical Journal*, 32 (04), 339-343. https://doi.org/10.4103%2Ftcmj.tcmj_71_20

Titova, O., Luzan, P., Sosnytska, N., Kulieshov, S., & Suprun, O. (2021). Information and Communication Technology Tools for Enhancing Engineering Students' Creativity. In V. Ivanov, J. Trojanowska, I. Pavlenko, J. Zajac, D. Peraković (Eds.), *Lecture Notes in Mechanical Engineering* (pp. 332-340). Springer. https://doi.org/10.1007/978-3-030-77719-7_33

Tkachenko, O., Chernykh, M., Kuznetcov, I., Karpovich, V., & Jatkiewicz, P. (2024). An impact of web animation on user perception and engagement. *Journal of the Balkan Tribological Association*, 30 (5), 875-897.

Tkachenko, O., Goncharov, V., & Jatkiewicz, P. (2024). Enhancing Front-End Security: Protecting User Data and Privacy in Web Applications. *Computer Animation and Virtual Worlds*, 35 (6), e70003. https://doi.org/10.1002/cav.70003

Tschang, F.T., & Almirall, E. (2021). Artificial Intelligence as Augmenting Automation: Implications for Employment. *Academy of Management Perspectives*, 35 (04), 642-659. https://doi.org/10.5465/amp.2019.0062

Véliz, C. (2021). Moral Zombies: Why Algorithms are not Moral Agents. *AI & society*, 36 (02), 487-497. https://doi.org/10.1007/s00146-021-01189-x

Venugopal, V.K., Gupta, A., Takhar, R., Liew, C.J., Jones, C., & Szarf, G. (2023). Navigating Fairness in Radiology AI: Concepts, Consequences, and Crucial Considerations. https://doi.org/10.48550/arXiv.2306.01333

Vilks, A., & Kipāne, A. (2018). Cognitive aspects of criminal justice policy. *Journal of Advanced Research in Law and Economics*, 9 (5), 1798-1805. https://doi.org/10.14505//jarle.v9.5(35).35

Xhafka, E., Sinoimeri, D., & Teta, J. (2024). Evaluating the Impact of E-Governance on Public Service Improvement in Albania: A Quantitative Analysis. *Sustainability (Switzerland)*, 16 (24), 10896. https://doi.org/10.3390/su162410896

Yang, W., Wei, Y., Wei, H., Chen, Y., Huang, G., Li, X., Li, R., Yao, N., Wang, X., Gu, X., Amin, M.B., & Kang, B. (2023). Survey on Explainable AI: From Approaches, Limitations and Applications Aspects. *Human-Centric Intelligent Systems*, 3 (03), 161-188. https://doi.org/10.1007/s44230-023-00038-y

Yermolenko, R., Klekots, D., & Gogota, O. (2024). Development of an algorithm for detecting commercial unmanned aerial vehicles using machine learning methods. *Machinery and Energetics*, 15 (2), 33-45. https://doi.org/10.31548/machinery/2.2024.33

Younas, A., & Zeng, Y. (2024). Proposing Central Asian AI Ethics Principles: A Multilevel Approach for Responsible AI. *AI and Ethics*. https://doi.org/10.1007/s43681-024-00505-7

Zaitseva, N.V., Symonenko, S.V., Titova, O.A., Osadchyi, V.V., & Osadcha, K.P. (2023). Fostering communication and collaboration skills for computer science students by means of ICT tools. *CEUR Workshop Proceedings*, 3553, 43-56. https://ceur-ws.org/Vol-3553/paper9.pdf

Conflict of interest declaration and originality

As stipulated in the *Code of Ethics and Best Practices* published in *Clío Journal*, the authors, *Zhang Qihui, Zhang Yingyu, Liang Jianzhong, Edilova Mariam and Nusupov Cholponbay*, declare that they have no real, potential or evident conflicts of interest, of an academic, financial, intellectual or intellectual property nature, related to the content of the article: *Moral borders and philosophical consideration of Artificial Intelligence: exploring responsibility, rights and ethical decision making*, in relation to their publication. Likewise, they declare that the work is original, has not been published partially or totally in another medium of dissemination, no ideas, formulations, citations or illustrations were used, extracted from different sources, without clearly and strictly mentioning their origin and without being duly referenced in the corresponding bibliography. They consent to the Editorial Board applying any plagiarism detection system to verify their originality.