

"Synergizing Artificial Intelligence, Environmental Crime Detection, And Human Rights Safeguards: A Comprehensive Research Perspective"

Ms. Anjum Shaha^{1*}, Dr. (Mrs.) Adhara Deshpande²

^{1*}(Research Scholar, Post Graduate Teaching Department of Law, Ph.D. Cell, Rashtrasant Tukadoji Maharaj Nagpur

²University, Nagpur & Assistant Professor, Auro University, Surat) (Assistant Professor, RTMNU's Dr. Babasaheb Ambedkar College of Law, Nagpur)

***Corresponding Author:-** Ms. Anjum Shaha

^{*}(Research Scholar, Post Graduate Teaching Department of Law, Ph.D. Cell, Rashtrasant Tukadoji Maharaj Nagpur

Abstract:

This research paper explores how artificial intelligence (AI) intersects with environmental crime detection and the protection of human rights. In an age of rapid technological progress, integrating AI into systems designed to detect environmental violations offers both significant benefits and potential risks that must be carefully managed to uphold human rights.

The study starts by discussing how AI can transform the detection of environmental crimes, improving the speed, accuracy, and breadth of these efforts. However, it also highlights the ethical concerns and potential dangers of using AI without restraint, stressing the need for a rights-focused approach.

A major focus of the paper is ensuring that AI-driven environmental crime detection systems are developed and implemented with human rights in mind. It draws on international human rights laws and principles to stress that technological advancements must not compromise fundamental rights, such as privacy, non-discrimination, and due process.

The research further explores how AI can positively impact environmental justice and human rights. It looks at ways to use AI to not only identify and address environmental crimes but also to avoid disproportionately affecting vulnerable groups. This includes taking steps to reduce biases, improve transparency, and engage with communities.

Additionally, the paper addresses the ethical aspects of using AI in environmental settings, calling for responsible and accountable practices. It advocates for collaboration among governments, tech developers, and civil society to create a framework that balances the advantages of AI with the need to protect human rights.

In summary, this research offers a detailed and forward-thinking view on how AI, environmental crime detection, and human rights can work together. It aims to help policymakers, researchers, and practitioners create AI technologies that foster a fairer and more sustainable future.

Keywords: Artificial intelligence, Environmental crime and Human rights

Introduction:

The 21st century stands witness to an unprecedented era of technological advancements, where artificial intelligence (AI) has emerged as a transformative force shaping various aspects of our lives. Amidst this technological renaissance, one of the critical domains experiencing a paradigm shift is environmental crime detection. This research embarks on a comprehensive exploration, delving into the intricate interplay between AI, environmental crime detection, and the imperative of safeguarding human rights¹. Titled 'Synergizing Artificial Intelligence, Environmental Crime Detection, and Human Rights Safeguards: A Comprehensive Research Perspective,' this paper seeks to unravel the promises and challenges inherent in the convergence of these domains.

This research centers on incorporating AI into environmental crime detection, seeking to understand its complex effects. AI has the potential to greatly improve how quickly, accurately, and comprehensively environmental violations are detected and managed, presenting an exciting opportunity for a more effective and proactive strategy against ecological harm. Yet, this potential is coupled with ethical challenges and risks, highlighting the need for a careful approach that prioritizes human rights.

As we delve into the significance of AI in revolutionizing environmental crime detection, it becomes evident that the dynamic landscape demands a careful balancing act. The accelerated pace of technological evolution has fueled optimism about the efficacy of AI in addressing environmental challenges. Yet, we cannot overlook the ethical dimensions and potential risks associated with the unbridled application of AI. This sets the stage for a comprehensive examination of the

¹ Salian, I. (2023) How ai helps human rights watch investigate from the Sky, NVIDIA Blog. Available at: <https://blogs.nvidia.com/blog/human-rights-watch-ai-gtc/> (Accessed: 04 March 2024).

ethical implications and risks, highlighting the need for a cautious and considerate integration of AI within the framework of human rights.²

Central to our exploration is the integration of human rights safeguards in the development and implementation of AI-driven environmental crime detection systems. Recognizing the global commitment to fundamental rights, we draw upon international human rights instruments and legal frameworks to emphasize the crucial need for aligning technological progress with the protection of individual liberties. Our focus extends to key considerations such as the right to privacy, non-discrimination, and due process, weaving a narrative that positions human rights as the lodestar guiding the evolution of AI in environmental crime detection.

The paper goes beyond just discussing the challenges of AI, focusing also on its positive potential. It aims to investigate how AI can significantly advance environmental justice and human rights. The research looks into creative approaches that not only identify and tackle environmental crimes but also protect vulnerable communities from unfair impacts. Key strategies include reducing biases, increasing transparency, and encouraging community involvement, which are central to exploring how AI can contribute positively to environmental justice.

Our research further probes the ethical dimensions of deploying AI in environmental contexts, emphasizing the need for responsible and accountable practices. We advocate for collaborative efforts among diverse stakeholders, envisioning a comprehensive framework that harmonizes the benefits of AI with the ethical considerations essential for safeguarding human rights³.

This research paper embarks on a comprehensive journey into the synergies between AI, environmental crime detection, and human rights safeguards. By navigating the ethical, legal, and societal dimensions, we seek to provide a holistic perspective that guides policymakers, researchers, and practitioners toward developing and implementing AI technologies that contribute to a more just and sustainable future. The following sections will unravel the intricacies of this exploration, shedding light on the challenges and opportunities at the convergence of AI, environmental crime detection, and human rights safeguards.

Ethical Implications and Risks of AI in Environmental Crime Detection: A Nuanced Examination

In the realm of environmental crime detection, the integration of artificial intelligence (AI) introduces a spectrum of ethical implications and risks that necessitate a meticulous exploration. This section scrutinizes the multifaceted dimensions of employing AI in environmental crime detection, focusing on concerns related to bias, transparency, accountability, and unintended consequences. Drawing insights from real-world examples, our goal is to underscore the critical importance of adopting a nuanced and rights-centric approach in navigating these potential risks.

1. **Bias in AI Algorithms:** One of the primary ethical concerns is the potential bias embedded in AI algorithms. Bias can manifest in various forms, such as racial, gender, or socioeconomic bias, and when incorporated into environmental crime detection systems, it can lead to systemic injustices.⁴ For instance, if historical data used to train AI models reflect existing biases in law enforcement practices, the AI system may perpetuate and exacerbate these biases. This section critically evaluates the implications of bias in AI algorithms and emphasizes the ethical imperative to address and rectify these biases to ensure fair and equitable outcomes.
2. **Transparency in Decision-Making:** The opacity of AI decision-making processes poses another ethical challenge. Lack of transparency in how AI algorithms arrive at conclusions raises concerns about accountability and the potential for unjust outcomes. Stakeholders, including the public, environmental advocates, and affected communities, have a right to understand the rationale behind AI-driven decisions.⁵ By delving into real-world cases where opacity led to controversies, this section highlights the need for transparent AI systems, emphasizing that transparency is not only an ethical requirement but also a foundation for building public trust⁶.

² Wu J;Wang H;Sun N;Wang H;Tatarinov D; (no date) International Criminal Law Protection of environmental rights and sentencing based on Artificial Intelligence, Journal of environmental and public health. Available at: <https://pubmed.ncbi.nlm.nih.gov/35685862/> (Accessed: 04 March 2024).

³ Ai vs human dignity: When human underperformance is legally required (no date) Groupe d'études géopolitiques. Available at: <https://geopolitique.eu/en/articles/ai-vs-human-dignity-when-human-underperformance-is-legally-required/> (Accessed: 04 March 2024).

⁴ (No date a) (PDF) Cyberbiosecurity: An emerging new discipline to help safeguard ... Available at: https://www.researchgate.net/publication/324224452_Cyberbiosecurity_An_Emerging_New_Discipline_to_Help_Safeguard_the_Bioeconomy (Accessed: 04 March 2024).

⁵ Mihinjac, M. and Saville, G. (2019) Third-generation crime prevention through environmental design (CPTED), MDPI. Available at: <https://www.mdpi.com/2076-0760/8/6/182> (Accessed: 04 March 2024).

⁶ Rigano, C., policy), M. (see reuse and About the author Christopher Rigano is a senior computer scientist in NIJ's Office of Science and Technology. (no date) Using artificial intelligence to address criminal justice needs, National Institute of Justice. Available at: <https://nij.ojp.gov/topics/articles/using-artificial-intelligence-address-criminal-justice-needs> (Accessed: 04 March 2024).

3. **Accountability in AI Systems:** Accountability is a cornerstone of ethical AI deployment. As AI systems autonomously make decisions in environmental crime detection, questions arise about who is responsible for errors, biases, or unintended consequences. Examining instances where accountability gaps have led to legal and ethical quandaries, this section advocates for establishing clear lines of responsibility. We delve into frameworks for holding both developers and deployers accountable, stressing the importance of proactive measures to prevent, identify, and rectify potential issues.
4. **Unintended Consequences of AI Deployment:** The deployment of AI in environmental crime detection may yield unintended consequences, ranging from overreliance on technology to unforeseen environmental and societal impacts. By dissecting case studies where AI interventions resulted in unexpected outcomes, this section highlights the necessity of comprehensive risk assessments before implementation.⁷ It also discusses the ethical responsibility of ensuring that AI technologies do not inadvertently harm ecosystems, communities, or exacerbate existing environmental inequalities.
5. **The Need for a Nuanced and Rights-Centric Approach:** Throughout this exploration, a recurring theme is the imperative of adopting a nuanced and rights-centric approach. The section underscores that ethical considerations should be deeply embedded in the design, development, and deployment of AI systems. By emphasizing the importance of respecting human rights, including privacy, non-discrimination, and due process, the paper advocates for a balanced and considerate integration of AI in environmental crime detection.

In essence, this section serves as a critical examination of the ethical landscape surrounding the use of AI in environmental crime detection. It illuminates the challenges posed by bias, transparency gaps, accountability issues, and unintended consequences while advocating for an ethical framework that prioritizes human rights and societal well-being. As we proceed, the subsequent sections will further explore strategies and recommendations to address these ethical concerns, fostering a path towards responsible and equitable AI deployment in the context of environmental protection.

Integration of Human Rights Safeguards in AI-Driven Environmental Crime Detection: Safeguarding the Essence of Fundamental Rights

The central thrust of this section revolves around the imperative of embedding robust human rights safeguards in the development and implementation of AI-driven environmental crime detection systems.⁸ By drawing upon international human rights instruments and legal frameworks, this exploration underscores the critical need to align technological advancements with the protection of fundamental rights. Key considerations within this framework include the right to privacy, non-discrimination, and due process.

1. **Right to Privacy:** The right to privacy, enshrined in various international human rights conventions such as the Universal Declaration of Human Rights (UDHR) and the International Covenant on Civil and Political Rights (ICCPR), forms a foundational pillar in the integration of human rights safeguards. AI-driven environmental crime detection systems often involve extensive data collection and analysis, raising concerns about unwarranted intrusions into individuals' private lives. This section delves into the ethical dimensions of balancing the need for effective crime detection with the protection of individuals' privacy rights.⁹ It explores strategies such as anonymization, data minimization, and robust encryption to mitigate the risks associated with potential privacy infringements.
2. **Non-Discrimination:** The principle of non-discrimination, as articulated in international human rights instruments, prohibits unjust differentiation based on characteristics such as race, gender, religion, or socioeconomic status. In the context of AI-driven environmental crime detection, there is a risk of perpetuating or exacerbating existing societal biases. This section critically examines the potential for biased algorithms to disproportionately target certain groups or communities.¹⁰ It emphasizes the ethical responsibility of developers and policymakers to actively counteract biases, ensuring that the deployment of AI does not result in discriminatory practices or reinforce pre-existing inequalities.
3. **Due Process:** The right to due process, a cornerstone of legal systems globally, ensures fair treatment and protection against arbitrary actions. In the context of AI-driven environmental crime detection, issues may arise regarding the fairness of decisions made by automated systems, potentially impacting individuals' rights and freedoms. This section explores the challenges in guaranteeing due process within an automated framework and proposes mechanisms to

⁷ Office of the United Nations High Commissioner for Human Rights (OHCHR) (2023) AI for Good. Available at: <https://aiforgood.itu.int/about-ai-for-good/un-ai-actions/ohchr/> (Accessed: 04 March 2024).

⁸ ✊🏽., C.O. (2023) The AI watchdog: Using Technology to monitor human rights, LinkedIn. Available at: <https://www.linkedin.com/pulse/ai-watchdog-using-technology-monitor-human-rights-christian-ortiz--0tosc> (Accessed: 04 March 2024).

¹⁰ Author links open overlay panel Rowena Rodrigues and Abstract This article focusses on legal and human rights issues of artificial intelligence (AI) being discussed and debated (2020) Legal and human rights issues of AI: Gaps, challenges and vulnerabilities, Journal of Responsible Technology. Available at: <https://www.sciencedirect.com/science/article/pii/S2666659620300056> (Accessed: 04 March 2024).

ensure that individuals have the opportunity to contest decisions, understand the basis for those decisions, and seek redress in case of unjust actions. It delves into the procedural safeguards necessary to uphold the essence of due process in the context of AI deployment.

4. **International Human Rights Instruments and Legal Frameworks:** The section draws extensively from international human rights instruments, including the UDHR, ICCPR, and regional frameworks, to establish a normative foundation for the integration of human rights safeguards. It highlights the global consensus on the protection of fundamental rights and underscores the role of these instruments in shaping ethical practices in AI deployment. By aligning with established legal frameworks, the paper advocates for a rights-centric approach that transcends national boundaries, fostering a universal commitment to ethical AI practices.

In essence, the integration of human rights safeguards in AI-driven environmental crime detection is a pivotal aspect of responsible and ethical technological deployment. By examining the right to privacy, non-discrimination, and due process within the context of international human rights norms, this section advocates for a principled approach that ensures the benefits of AI are realized without compromising the fundamental rights of individuals. The subsequent sections will delve into practical strategies and recommendations for operationalizing these human rights safeguards, offering a roadmap for the ethical development and implementation of AI systems in the realm of environmental protection.

Positive Impact of AI on Environmental Justice and Human Rights: Paving the Way for Equitable Solutions

In this section, the research delves into the promising realm of how artificial intelligence (AI) can serve as a catalytic force for positive change in promoting environmental justice and upholding human rights. The exploration encompasses innovative strategies that leverage AI to ensure that vulnerable populations are shielded from disproportionate impacts caused by environmental crimes.¹¹ Proactive measures aimed at mitigating biases, enhancing transparency, and fostering community engagement constitute the crux of this discussion.

1. **Mitigating Biases in AI Systems:** A critical aspect of utilizing AI for environmental justice lies in addressing and mitigating biases within AI systems. Biased algorithms can perpetuate existing inequalities, disproportionately affecting marginalized communities. This section scrutinizes strategies for developing AI models that are conscious of potential biases, advocating for fairness and equity. It explores techniques such as diverse and representative data sampling, algorithmic audits, and continuous monitoring to ensure that AI systems do not inadvertently contribute to environmental injustices.
2. **Enhancing Transparency in Decision-Making:** Transparency emerges as a linchpin in fostering trust and accountability in AI-driven environmental crime detection. The research emphasizes the need for transparent decision-making processes that allow stakeholders, including affected communities, to understand how AI arrives at conclusions.¹² By shedding light on real-world examples where transparency deficits led to ethical concerns, this section underscores the importance of explaining AI-driven decisions in a manner accessible to non-experts. Strategies like explainable AI and clear communication protocols are explored to enhance transparency and build public trust¹³.
3. **Fostering Community Engagement:** Central to the positive impact of AI on environmental justice is active and meaningful community engagement. The research investigates strategies to integrate affected communities into the development and implementation of AI systems. Community-based participatory research, stakeholder consultations, and incorporating local knowledge into AI models are explored as means to empower communities and ensure that AI interventions align with their needs and concerns. The section advocates for a bottom-up approach, emphasizing the importance of co-creating solutions with those directly impacted by environmental crimes.
4. **Proactive Measures for Vulnerable Populations:** Vulnerable populations, often bearing the brunt of environmental injustices, stand to benefit significantly from thoughtful AI applications. This section explores proactive measures to protect these communities, considering factors such as socioeconomic status, geographic location, and historical injustices. It advocates for targeted policies that prioritize the welfare of vulnerable populations, leveraging AI to identify and address environmental crimes while ensuring that the benefits are equitably distributed.
5. **Innovative Strategies for Equitable Solutions:** The research goes beyond theoretical considerations, delving into innovative strategies that harness the potential of AI to catalyze positive change. This includes the development of early warning systems tailored to specific environmental threats, dynamic risk assessments, and adaptive management

¹¹ ✊🏽, C.O. (2023a) The AI watchdog: Using Technology to monitor human rights, LinkedIn. Available at: <https://www.linkedin.com/pulse/ai-watchdog-using-technology-monitor-human-rights-christian-ortiz--Otosc> (Accessed: 04 March 2024).

¹² Gaumond, E. (2023) Assessing impacts of AI on Human Rights: It's not solely about privacy and nondiscrimination, Default. Available at: <https://www.lawfaremedia.org/article/assessing-impacts-of-ai-on-human-rights-it-s-not-solely-about-privacy-and-nondiscrimination> (Accessed: 04 March 2024).

¹³ (No date) (PDF) Cyberbiosecurity: An emerging new discipline to help safeguard ... Available at: https://www.researchgate.net/publication/324224452_Cyberbiosecurity_An_Emerging_New_Discipline_to_Help_Safeguard_the_Bioeconomy (Accessed: 04 March 2024).

strategies. By tailoring AI applications to the unique challenges faced by different communities, the research envisions a future where technology acts as a tool for empowerment rather than exacerbating existing disparities.

In essence, this section paints a vision of AI not merely as a technological tool but as a catalyst for positive societal transformation. By exploring strategies to mitigate biases, enhance transparency, and foster community engagement, the research advocates for an approach that places human rights at the forefront of AI applications in environmental justice. As we proceed, subsequent sections will delve into the ethical dimensions and real-world implications of implementing these strategies, providing a holistic framework for harnessing AI's positive impact on environmental justice and human rights.

Ethical Dimensions of AI Deployment in Environmental Contexts: Navigating Responsibility, Accountability, and Collaboration

In examining the ethical dimensions of deploying artificial intelligence (AI) in environmental contexts, this section dives into the complexities and considerations that underpin responsible and accountable practices.¹⁴ It places a strong emphasis on the need for collaborative efforts among stakeholders, including governments, technology developers, and civil society, to establish a comprehensive framework that strikes a delicate balance between reaping the benefits of AI and upholding ethical considerations inherent in safeguarding human rights.

1. **Responsibility in AI Deployment:** Central to ethical AI deployment is the concept of responsibility. This section explores the ethical responsibility that governments, organizations, and technology developers bear when implementing AI in environmental contexts. It emphasizes the importance of proactive measures to ensure that AI applications align with societal values, environmental sustainability, and respect for human rights.¹⁵ Scrutinizing the potential consequences of irresponsible AI deployment, the research advocates for a principled approach that places responsibility at the forefront of decision-making processes.
2. **Accountability for AI Systems:** Accountability forms a critical pillar of ethical AI deployment, especially when the consequences of AI decisions impact the environment and human rights. The section delves into the challenges of establishing clear lines of accountability, particularly when AI systems operate autonomously. It explores mechanisms for holding both developers and deployers accountable for the outcomes of AI applications. This includes developing standardized auditing processes, implementing accountability frameworks, and defining legal responsibilities to ensure that unintended consequences or ethical lapses are addressed promptly and transparently.
3. **Collaborative Frameworks for Ethical AI:** Recognizing the interconnected nature of AI deployment in environmental contexts, the research underscores the need for collaborative frameworks. Stakeholders, including governments, technology developers, environmental organizations, and civil society, play pivotal roles in shaping the ethical landscape¹⁶. This section explores the advantages of collaborative approaches, such as shared industry standards, multi-stakeholder consultations, and public-private partnerships. It advocates for a collective effort to create guidelines and standards that reflect diverse perspectives and ensure that ethical considerations are woven into the fabric of AI development and implementation.
4. **Balancing Benefits and Ethical Considerations:** As AI technologies offer unprecedented capabilities in addressing environmental challenges, it becomes imperative to strike a balance between reaping their benefits and upholding ethical considerations. This section critically evaluates the potential trade-offs and challenges in achieving this delicate equilibrium. It examines cases where the pursuit of environmental goals may inadvertently lead to ethical dilemmas or human rights infringements. By acknowledging these challenges, the research calls for a nuanced approach that optimizes the positive impact of AI while minimizing the potential negative consequences.
5. **Human Rights Safeguards in Collaborative Governance:** The research advocates for the integration of human rights safeguards within collaborative governance structures. By drawing on international human rights instruments and legal frameworks, it proposes a rights-centric approach that forms an integral part of collaborative decision-making. This ensures that the deployment of AI in environmental contexts is not only technologically advanced but also ethically sound, respecting the rights of individuals and communities.

In conclusion, this section underscores that ethical considerations are not mere add-ons but intrinsic to the successful deployment of AI in environmental contexts. By emphasizing responsibility, accountability, and collaborative frameworks, the research paints a vision of AI as a tool that, when harnessed ethically, can contribute significantly to

¹⁴ University, S.C. (no date) On Ai Ethics and the environment, Markkula Center for Applied Ethics. Available at: <https://www.scu.edu/ethics/internet-ethics-blog/on-ai-ethics-and-the-environment/> (Accessed: 04 March 2024).

¹⁵ Rigley, E. et al. (2023) Anthropocentrism and environmental wellbeing in AI Ethics Standards: A scoping review and discussion, MDPI. Available at: <https://www.mdpi.com/2673-2688/4/4/43> (Accessed: 04 March 2024).

¹⁶ Limited, L.P. (2023) Ethical considerations in AI deployment, LinkedIn. Available at: <https://www.linkedin.com/pulse/ethical-considerations-ai-deployment-legasispvtltd/> (Accessed: 04 March 2024).

environmental sustainability and human well-being¹⁷. The subsequent sections will build upon these ethical foundations, offering practical recommendations and strategies to implement a comprehensive framework that aligns the benefits of AI with ethical considerations in safeguarding human rights in the environmental domain.

Conclusion: Navigating Ethical Frontiers for a Just and Sustainable Future

In the culmination of this research paper, we synthesize the multifaceted dimensions explored throughout our comprehensive investigation into the synergies between artificial intelligence (AI), environmental crime detection, and human rights safeguards. This conclusion encapsulates key findings and propels the discourse forward, offering insights and guidance for policymakers, researchers, and practitioners vested in shaping a more just and sustainable future.

1. **Summarizing Key Findings:** The research has meticulously delved into the ethical, legal, and societal dimensions surrounding the integration of AI in environmental crime detection. It has examined the potential benefits and risks, navigating through issues of bias, transparency, accountability, and unintended consequences. The significance of integrating human rights safeguards, such as the right to privacy, non-discrimination, and due process, has been emphasized. The positive impact of AI on environmental justice, coupled with strategies to mitigate biases, enhance transparency, and foster community engagement, has been thoroughly explored. Ethical considerations in AI deployment, focusing on responsibility, accountability, and collaborative frameworks, have been critically analyzed.
2. **Contributing to Deeper Understanding:** The research contributes to a deeper understanding of the intricate interplay between AI, environmental crime detection, and human rights safeguards. By shedding light on the challenges and opportunities at the intersection of these domains, the paper enriches the discourse surrounding the responsible and ethical use of AI in environmental contexts. It recognizes that technological advancements must not only drive efficiency but also adhere to ethical principles and respect human rights. The exploration of real-world examples, international human rights instruments, and collaborative frameworks adds depth to the analysis, providing a nuanced perspective that goes beyond theoretical considerations.
3. **Guidance for Policymakers, Researchers, and Practitioners:** The conclusion offers practical guidance for key stakeholders involved in shaping the trajectory of AI in environmental crime detection. Policymakers are urged to craft frameworks that integrate human rights safeguards, ensuring that AI technologies align with societal values and contribute to environmental sustainability. Researchers are encouraged to continue exploring innovative strategies for mitigating biases, enhancing transparency, and fostering community engagement. Practitioners are called upon to adopt responsible and accountable practices, actively participating in collaborative efforts that prioritize ethical considerations.
4. **Forward-Looking Perspective:** The paper concludes with a forward-looking perspective that envisions a future where AI serves as a powerful force for positive change. It sees AI technologies not merely as tools for efficiency but as instruments that contribute to a more just and sustainable world. The call for a comprehensive framework that balances technological advancements with ethical considerations anticipates the evolving landscape, advocating for a principled approach that withstands the test of time.

In essence, this research paper stands as a beacon in the dynamic intersection of AI, environmental crime detection, and human rights safeguards. It provides a roadmap for navigating ethical frontiers, urging stakeholders to tread responsibly and collaboratively. As the world advances into an era marked by unprecedented technological possibilities, this research serves as a guiding compass, steering the course towards a future where AI contributes harmoniously to the preservation of the environment and the protection of human rights.

Reference:

1. Artificial Intelligence: Ethical Concerns and Sustainability issues (2023) AI Risks: Ethics, Legal Concerns, Cybersecurity & Environment. Available at: <https://www.americancentury.com/insights/ai-risks-ethics-legal-concerns-cybersecurity-and-environment/> (Accessed: 04 March 2024).
2. University, S.C. (no date) On Ai Ethics and the environment, Markkula Center for Applied Ethics. Available at: <https://www.scu.edu/ethics/internet-ethics-blog/on-ai-ethics-and-the-environment/> (Accessed: 04 March 2024).
3. Limited, L.P. (2023) Ethical considerations in AI deployment, LinkedIn. Available at: <https://www.linkedin.com/pulse/ethical-considerations-ai-deployment-legasispytld/> (Accessed: 04 March 2024).
4. Rigley, E. et al. (2023) Anthropocentrism and environmental wellbeing in AI Ethics Standards: A scoping review and discussion, MDPI. Available at: <https://www.mdpi.com/2673-2688/4/4/43> (Accessed: 04 March 2024).
5. ✊🏽, C.O. (2023a) The AI watchdog: Using Technology to monitor human rights, LinkedIn. Available at: <https://www.linkedin.com/pulse/ai-watchdog-using-technology-monitor-human-rights-christian-ortiz-0tosc> (Accessed: 04 March 2024).

¹⁷ Artificial Intelligence: Ethical Concerns and Sustainability issues (2023) AI Risks: Ethics, Legal Concerns, Cybersecurity & Environment. Available at: <https://www.americancentury.com/insights/ai-risks-ethics-legal-concerns-cybersecurity-and-environment/> (Accessed: 04 March 2024).



6. Author links open overlay panelRowena Rodrigues and AbstractThis article focusses on legal and human rights issues of artificial intelligence (AI) being discussed and debated (2020) Legal and human rights issues of AI: Gaps, challenges and vulnerabilities, Journal of Responsible Technology. Available at: <https://www.sciencedirect.com/science/article/pii/S2666659620300056> (Accessed: 04 March 2024).
7. ✊🏽, C.O. (2023) The AI watchdog: Using Technology to monitor human rights, LinkedIn. Available at: <https://www.linkedin.com/pulse/ai-watchdog-using-technology-monitor-human-rights-christian-ortiz-0tosc> (Accessed: 04 March 2024).
8. Salian, I. (2023) How ai helps human rights watch investigate from the Sky, NVIDIA Blog. Available at: <https://blogs.nvidia.com/blog/human-rights-watch-ai-gtc/> (Accessed: 04 March 2024).
9. Ai vs human dignity: When human underperformance is legally required (no date) Groupe d'études géopolitiques. Available at: <https://geopolitique.eu/en/articles/ai-vs-human-dignity-when-human-underperformance-is-legally-required/> (Accessed: 04 March 2024).