Promoting and Advancing Human Rights in Global AI Ecosystems

The Need for A Comprehensive Framework under International Law

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Executive Summary

Artificial intelligence (AI) is fundamentally transforming human interactions, key processes and systems that underpin modern society, from decision-making mechanisms to information flows, economic structures, and international relations. While its potential is comprehensive, AI introduces significant risks, such as reduced human autonomy, algorithmic bias, data privacy threats, and challenges in accountability for algorithmic harm. Emerging technologies, such as embodied AI and large language models, exacerbate these risks, affecting human-machine interactions and raising concerns about environmental sustainability and human rights across the AI value chain.

In response to far-reaching societal impacts of AI, policymakers are increasingly adopting a human rights lens for AI governance. However, the regulatory landscape remains fragmented and characterized by Western led initiatives as well as inconsistent enforcement. To address these limitations, a unified and binding international framework is urgently needed.

The proposed Convention on AI, Data, and Human Rights (drafted as the "Munich Convention on AI, Data, and Human Rights") is an initiative toward such a framework. Developed with contributions from over 50 global experts, it proposes an international convention to align AI governance with human rights principles. This whitepaper explores the underlying rationale behind the convention, emphasizing its alignment with the norms and principles articulated in the Universal Declaration of Human Rights and the UN Charter. It examines the relevance of safeguards against AI's misuse in facilitating human rights violations, with particular focus on protecting underrepresented or marginalized groups, including indigenous peoples, and addressing collective rights. It furthermore points to the necessity to codify rights that empower individuals to opt out, be forgotten, seek explanations, and access remedies to maintain adequate human rights standards in the context of AI.

The urgency to act arises from the escalating impact of AI and the rapid pace of political and technological advancements. The UN Human Rights Council (UNHRC) is particularly well poised to play a leading role in initiating global discussions on a binding convention for AI governance, grounded in human rights principles. Drawing on its established mandate to uphold human rights globally, the UNHRC has a record of successfully embedding human rights principles into international frameworks, as demonstrated by its endorsement of the UN Guiding Principles on Business and Human Rights and the recognition of the right to a clean, healthy and sustainable environment. Through dedicated action around promoting a convention on AI and human rights, the UNHRC can foster international consensus and proactively shape the future of AI in a manner that prioritizes the values and principles enshrined in the key documents of international human rights law.

1. Introduction

The development of artificial intelligence (AI) is fundamentally revolutionizing human life, impacting individuals, communities, and society as a whole. Once confined to computer science, AI now influences a wide range of sectors—from agriculture, healthcare, and finance to cybersecurity, law enforcement, public administration, and urban planning among others.[1] As AI systems become increasingly pervasive, they also push the boundaries of innovative research in fields like medicine, psychology, and robotics.[2] This growing presence, while transformative, raises complex questions about privacy, human autonomy, and non-discrimination, especially as AI systems are increasingly integrated high-stakes decisions in emergency responses, healthcare, and even armed conflicts.[3] Beyond the often-discussed concerns around privacy, bias, and transparency, exist more contentious concerns regarding the use of AI in areas such as public influence, national security, and cyber espionage.[4] Concrete examples include the deployments of robots at international borders[5], the use of AI in gambling[6], and manipulative psychological techniques in digital marketing.[7] Marginalized or underrepresented groups—including women, children, refugees and individuals with disabilities or neurodivergence—are particularly affected by AI's potential for harm.[8]

Recognizing the urgent need to address these issues, various international organizations and UN member states have increasingly engaged in AI regulation and governance frameworks.[9] Major steps in this direction include the United Nations General Assembly's Resolution on "Safe, Secure and Trustworthy AI," the EU AI Act, and the Council of Europe's 'Framework Convention on AI, Human Rights, Democracy, and the Rule of Law.'[10] In September 2024, the adoption of the Global Digital Compact by the UN General Assembly further reinforced the need for comprehensive international cooperation on digital governance and AI regulation.[11] Despite these significant milestones, challenges remain. Current regulatory frameworks often fail to address the global digital divide, the disproportionate risks AI poses to marginalized communities, and human rights issues embedded in value chain of AI. As highlighted by earlier frameworks in AI ethics[12], the impact of AI extends beyond traditional human rights, intersecting with categories of international law. For instance, the militarization of AI underscores the need for a cohesive international strategy to ensure AI deployment aligns with international humanitarian law.[13]

In July 2024, the Institute of Ethics in Artificial Intelligence, in partnership with Globethics, convened the Munich Summit on AI and Human Rights.[14] This gathering of international experts led to the drafting of the Munich Convention on AI, Data, and Human Rights, a proposed framework aimed at advancing global AI governance based on human rights principles understood within the wider normative space of international law.[15] The document calls for the prohibition of harmful AI uses, the definition of domains critical to the enjoyment of AI, and the establishment of robust enforcement mechanisms to prevent adverse structural human rights impacts created by or linked to AI.

The following whitepaper introduces the Munich Convention, emphasizing the need for a global, human rights-based international convention on AI. It begins by examining the role of human rights in international law and analyzes the systemic impact of AI on these rights. The paper argues that the narrow framing of human rights solely as individual rights and AI only as the application of specific systems is insufficient to address AI's broader implications on fundamental and human rights. Instead, it calls for a systemic perspective that considers the entire AI and data supply chain, as well as its effect on collective rights and foundational principles of international law. Building on this analysis, the paper outlines the rationale for the proposed convention, details its core features, and offers actionable recommendations for the UN Human Rights Council (UNHRC) to address these challenges.

2. International Law and Human Rights

The idea of addressing AI from a human rights perspective does not exist in a normative vacuum. In fact, existing international legal instruments have already had a significant impact on individuals, communities, and nations, **driving positive change** in contexts such as development aid, economic collaboration, the resolution of international crises, disarmament or the governance of technologies. **International human rights law, in particular the UN Charter, forms a cornerstone of this framework**.[16] Since the adoption of Universal Declaration of Human Rights by the UN General Assembly in 1948[17], it has evolved to address the diverse needs of society, including those of marginalized groups, while **responding to emerging technological, humanitarian, political, and social challenges**. This adaptability of human rights interacts with other domains of international law, particularly the UN Charter and international humanitarian law, **creating a complex and interconnected normative framework that underpins international relations**. While their remains a debate on the relationship between these norms—particularly international humanitarian law and international human rights law— the interconnected nature of AI, along with its dual-use character, calls for a legal discourse that **considers diverse perspectives and transcends traditional branches of international law**.[a]

2.1. International Law

The UN Charter articulates the **purposes and principles underlying this foundational treaty of the UN**, such as refraining from the use of force, the promotion of friendly relations among nations, and the sovereign equality of states and the self-determination of peoples.[18] To uphold this normative framework governing relations between states, international law relies on various normative sources and mechanisms including the binding resolutions of the UN Security Council.[b] Conventional international law is articulated through binding treaties that states negotiate, ratify, and implement, thereby committing themselves to specific obligations. Customary international law, developed through consistent state practice and *opinio juris* (the belief that such practices are legally obligatory), complements these treaties.[19] The **UN General Assembly, though not producing legally binding resolutions, contributes significantly through soft law** instruments that guide state behavior.[20,21]

Despite its aspirations, international law faces numerous challenges, particularly in enforcement, due to the absence of a universally accepted authority to enforce it.[22,23] In spite of its inherent weaknesses, international law has nevertheless played a pivotal role **in advancing key global objectives**. For example, the principle of self-determination, codified in the UN Charter, served as a **catalyst for the decolonization movement**.[24] Further efforts to address issues such as modern slavery, apartheid, and systemic discrimination have been bolstered by international legal mechanisms and the active involvement of institutions like the UN. International legal frameworks have also played a major role in the **prohibition, limitation and governance of technologies**, including global collaboration on the peaceful use of nuclear energy.[25] Moreover, international treaties such as the Hague and Geneva Conventions or the Outer Space Treaty have established **critical protections for individuals in armed conflict[26]** or limited the **use of technologies in warfare**.[27]

More recently, international law has expanded its scope to address global challenges such as climate change and sustainable development, exemplified by the Rio Declaration on Environment and Development and the Paris Agreement.[28] Therefore, **international law has emerged as a powerful instrument to address and solve international problems including the governance of technologies.**[29]

2.2. The Status of Human Rights in International Law

Human rights constitute a **fundamental norm within the space of international law**.[30] The United Nations Charter explicitly recognizes their significance, reaffirming "faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women."[31] The Universal Declaration of Human Rights (UDHR) encapsulates this notion in its First Article, stating that: "All human

[a] An attempt to bridge different branches of international law within a single framework can be found in the UN Guiding Principles on Business and Human Rights, which, in Commentary 12, explicitly includes international humanitarian law within the scope of corporate human rights responsibilities.

[b] Furthermore, the Statute of the International Court of Justice refers to the general principles of law "*recognized by civilized nations*" and points at the importance of "*judicial decisions and the teachings of the most highly qualified publicists of the various nations, as subsidiary means for the determination of rules of law*". (International Court of Justice. (1945). Statute of the International Court of Justice. United Nations. Art. 38(1).

beings are born free and equal in dignity and rights." (Art. 1, UDHR).[32] This assertion implies that human rights, centered around dignity, freedom, and equality, **exist independently of and prior to their implementation or recognition by states, international organizations, or other actors** in global affairs.[c] Furthermore, human rights law differs from traditional international law in a crucial aspect: while the latter governs relationships between sovereign states, **human rights imposes obligations on states vis-à-vis their citizens and individuals living under their jurisdictions**.[33] Thus, human rights are fundamentally designed as legal frameworks governing nation-states rather than directly regulating individuals or organizations.

The **International Bill of Human Rights**, comprising the UDHR itself, the International Covenant on Civil and Political Rights (ICCPR), and the International Covenant on Economic, Social and Cultural Rights (ICESCR), **forms the cornerstone of international human rights law**.[34] While the UDHR, adopted by the UN General Assembly in Resolution 217, articulates human rights in the form of a declaration, the **ICCPR and ICESCR establish binding obligations for states to respect, protect, and fulfill human rights**.[35] The framework encompasses a wide range of fundamental rights, including freedom from slavery, the prohibition of torture, equality before the law, the right to privacy, and the right to health, among others. The 1993 Vienna World Conference on Human Rights reaffirmed the **indivisible and interdependent nature of these rights**, regardless of their categorization as civil, political, economic, social, or cultural rights.[36]

In accordance with the UN human rights framework, human rights law imposes **positive** and **negative obligations on states**. [37] For instance, the explicit prohibition of torture exemplifies a negative obligation for states **not to engage in any actions regarded as torture**, while the **duty to prevent discrimination through legislation** presents a positive obligation to engage in measures to effectively realize and protect human rights.[38] The concept of positive obligations extends beyond the International Bill of Human Rights to other human rights frameworks. For instance, the UN Human Rights Council has highlighted the **intrinsic link between human rights and the prevention of genocide**. [39] It has also underscored the need for states to **adopt active measures to prevent incitement of ethnic, racial or sectarian hatred** and other forms of discrimination, aligning with earlier developments in rulings of the International Court of Justice. [40] The classification of human rights as absolute or relative rights is also a crucial concept in international human rights law. [41] **Absolute rights, such as the prohibition of torture or the prohibition of slavery,** cannot be derogated from under any circumstances, including declared states of emergency, international conflicts, or terror attacks.[42] On the contrary, **relative rights can be limited or restricted under certain circumstances**[43], provided that the limitations are prescribed by law and proportionate to achieve a legitimate aim such as public safety, national security, public health, or the rights and freedoms of others.

2.3. The Evolution of International Human Rights Law

The evolution of international human rights law since the adoption of the International Bill of Human Rights has been marked by the **emergence of numerous treaties, conventions and declarations** (see Appendix 1) that have further defined and expanded human rights in various contexts. This reflects the **dynamic nature of human rights codification**, as acknowledged in the Vienna Declaration and Programme of Action (1993).[44]

Following the adoption of the Universal Declaration of Human Rights (UDHR) in 1948, several *regional human rights frameworks* have been developed, each reflecting specific cultural and historical contexts.[45] These regional frameworks include, among others, the European Convention on Human Rights (ECHR) of the Council of Europe, American Convention on Human Rights (ACHR) of the Organization of American States (OAS), the ASEAN Human Rights Declaration, the Arab Charter of Human Rights and the African Charter on Human and Peoples' Rights (ACHPR) of the African Union.[46] Regional systems often offer stronger protections and enforcement mechanisms that are closely aligned with their particular contexts and historical traditions. This manifests in the **prohibition of the death penalty under the Council of Europe** framework[47] or the **emphasis of the ACHPR on collective rights** including the right of peoples to self-determination, their right to freely manage natural resources, and their right to peace.[48]

[c] Appendix 1 contains a list of pivotal events, intellectual movements, and contributions in the history of human rights and peace.

The **recognition of the specific needs of marginalized groups** has led to the development of conventions targeting these groups, ensuring their rights are protected in terms that are more concrete.[49] These include instruments such as the Convention Relating to the Status of Refugees (1951), the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW, 1979), Convention on the Rights of the Child (CRC, 1989), the Convention on the Rights of Persons with Disabilities (CRPD, 2006). These conventions have brought about **tangible changes in people's lives**, for instance when considering the impact of the CRC on global mortality rate for children or the role of the CRPD in promoting the inclusion of individuals with disabilities and barrier-free access in various spheres of life. [50,51,52]

In addition to the protection of individual rights, international human rights law has increasingly recognized **collective rights, particularly for ethnic minorities, indigenous peoples and other distinct groups**[5354]. A more recent development in the recognition of collective rights is the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), adopted in 2007.[55] This landmark document explicitly recognizes the right of **indigenous peoples to maintain and strengthen their distinct political, legal, economic, social, and cultural institutions** (Article 5) and their right to protect and develop **their cultural heritage and traditional knowledge** (Article 31).

Concurrently, international human rights law has seen a **refinement and concretization of existing norms** from the International Bill of Rights.[56] The Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, for instance, elaborates on and strengthens the prohibition of torture outlined in Article 5 of the Universal Declaration of Human Rights (UDHR). Similarly, the International Labour Organization (ILO) has played a crucial role in specifying **labor rights**, some predating the UN human rights system itself.[57] The Freedom of Association and Protection of the Right to Organize Convention, for example, builds upon Article 23 of the UDHR, which recognizes the right to form and join trade unions.[58] **In response to technological and bioethical advancements, new instruments have emerged to protect human dignity,** including the UNESCO Universal Declaration on Bioethics and Human Rights (2005) and the Council of Europe's Convention on Human Rights and Biomedicine (Oviedo Convention).[59] The UN Human Rights Council has been instrumental in driving the conversation on human rights, passing significant resolutions such as the **recognition of a healthy environment** as a human right (Resolution 48/13, October 2021). Similarly, the resolution of the **UN General Assembly on the Declaration on the Right to Development** further exemplifies the gradual evolution of international human rights law in expanding and refining the scope of human rights, also involving technological developments and societal issues.[60]

Another significant development in international human rights law has been the **increasing responsibility of non-state actors, particularly corporations**, in respecting human rights.[61] The UN Guiding Principles on Business and Human Rights (2011) have contributed to embedding **human rights considerations within corporate governance**. These frameworks encourage businesses to adhere to human rights standards and incorporate mechanisms such as whistleblower systems to report violations. The rise of Environmental, Social, and Governance (ESG) criteria and the work of rating agencies also reflects the growing influence of human rights considerations on corporate practices.[62]

The depicted trends do not encompass the full evolution of human rights; however, a study of various UN conventions, regional instruments, soft law, resolutions, and court rulings at the national, regional, and international levels reveals an **increasingly intricate network of human rights obligations**. Furthermore, this evolution reflects **diverse international perspectives in an evolving global context characterized by an increasingly multipolar order of international affairs and the emergence of different regional perspectives on human rights**.

3. The Impact of AI on Human Rights

The key question regarding AI is how these technologies affect human interactions, but also governance and social development. International human rights law, as a subset of international law, establishes that states have legal obligations to respect, protect, and fulfill human rights. Moreover, the impact of AI cannot be confined to the specific understanding of impact under human rights law, as its **impact blurs the lines between traditional categories of law**, for instance international humanitarian law and human rights law. This is particularly evident in AI's dual-use nature—where its **application in armed conflicts brings it within the scope of international humanitarian law**[63] —as well as its **cross-border implications, which raise questions of state sovereignty and international security** under the UN Charter. Addressing this requires a nuanced analysis of AI, not only as a technological tool but also in terms of its core features and diverse applications. Additionally, **a critical evaluation of existing legal frameworks is necessary** to determine how effectively they address the challenges posed by AI, and to identify gaps or asymmetries that require action at the international level.

3.1. Artificial Intelligence: Definitions, Features and Impacts

AI is a rapidly evolving field of technology that aims to create systems capable of **performing tasks that typically require human intelligence**.[64] While there is **no universally accepted definition**, AI generally refers to the development of computer systems that can perform tasks such as prediction, visual perception, speech recognition, decision-making, and language translation.[d,65] The Organisation for Economic Co-operation and Development (OECD) defines AI as "machine-based systems that can, for a given set of human-defined objectives, make predictions, recommendations, or decisions influencing real or virtual environments. AI systems are designed to operate with varying levels of autonomy", a definition that aligns with the EU Artificial Intelligence Act and will be used throughout this paper when referring to AI.[66] Given the wide perspective emerging from this definition, the following section focuses on the underlying features of AI that distinguish it from other already existing technologies, its evolution and applications, and finally its role in socio-economic processes.

The Underlying Technological Features of AI

AI systems rely on various models and technologies, such as statistical models, machine learning algorithms, and neural networks.[67] These models analyze data inputs to generate predictions or automate tasks. For instance, natural language processing (NLP) tools like ChatGPT use probabilistic models to predict the next word in a sentence, demonstrating the power of AI in processing unstructured data. [68] **The effectiveness of these systems depends on the performance of their underlying models, the quality and representativeness of the training data, and the expertise of the developers in designing and fine-tuning them**.[69]

Data plays a critical role in AI development, serving as the foundation for learning, improvement, and accuracy. Data is commonly understood as any digital representation of acts, facts, or information and is further divided into structured data (e.g., spreadsheets, databases) and unstructured data (e.g., text, audio, images).[70] **However, data often simplifies complex realities, leading to potential biases and inaccuracies**. For example, crime rates aggregated from official records may not reflect the true prevalence of crime due to factors such as underreporting or societal stigmas.[71] Incomplete data sets or omissions such as lack of data from minorities can lead to algorithmic biases, underscoring the importance of robust data collection and governance in AI development.[72] A specific challenge is the handling of personal data, which is subject to legal protections under frameworks like the EU General Data Protection Regulation (GDPR).[73] Personal data, defined as any information relating to an identifiable individual, has become increasingly relevant in AI applications, especially those requiring sensitive decision-making processes.[74]

The Evolution and Applications of AI

The concept of AI dates to the 1940s, paralleling the invention of computers.[75] Early AI research focused on automating tasks using computational techniques, but the advent of the internet and **exponential**

[d] In fact, algorithms can be trained through supervised, semi-supervised, unsupervised, or reinforcement learning. AI does not always imply full automation; instead, it often incorporates varying levels of human input and oversight.

advancements in computational power have dramatically accelerated its evolution.[76] The availability of massive datasets and global connectivity has enabled AI to permeate nearly every sector of society.[77]

For instance, in medicine, AI facilitates diagnostics and personalized treatments, while in finance, it aids in risk evaluation and fraud detection.[78] AI powers self-driving vehicles, robotics, content creation and enhances user experiences on streaming platforms and gaming.[79] Moreover, it plays a critical role in automated decision-making, extending to fields like military operations.[80] One of the most dynamic frontiers in AI is embodied systems.[81] These include robots[82], autonomous vehicles[83], and wearable technologies[84] that enable direct human-AI interaction, influencing decision-making in distinctive ways. Studies suggest that even when AI does not dictate final decisions, individuals often rely heavily on its recommendations.[85]

Furthermore, discussions on **artificial general intelligence** (AGI) are increasing; AGI refers to a hypothetical machine intelligence capable of performing any intellectual task a human can.[86] Similarly, **generative AI** has gained attention for its ability to produce text, images, videos, and other data, including large language models (LLMs).[87]

The multitude of AI uses cases reinforced one particular observation, namely that a crucial aspect of AI's development lies in its purpose-specific application. Often, the same **foundational technology can be adapted for vastly different objectives**. For example, robotic technologies designed for industrial automation can also be repurposed for military uses, and vice versa. The same applies to AI-driven image recognition of satellite pictures, which can be used for humanitarian or military purposes.[88] This duality underscores the **importance of understanding the context and purpose behind AI applications, as its societal impact can vary dramatically based on its deployment**.

AI as an Economic Force

Apart from specific use cases and application contexts, AI represents a **foundational innovation with transformative effects on society and the economy, comparable to previous technologies such as electricity and the internet**. Its ability to analyze vast amounts of data, automate complex processes, and enhance precision has made AI, but also subsets of AI such as generative AI[89], a driver of economic, political and societal change.[90] By enabling new ways of creating value and enabling labor productivity growth, AI influences **market structures, productivity, and employment**, while also fostering the emergence of entirely new business models based on the use and evaluation of data.[91] AI is therefore likely to have effects on labor markets, but also on the global economy as such with repercussions in terms of **global economic equality**.[92] The ramification of such effects are visible in the context of the platform economy and the increased use of AI in the service sector.[93] A significant factor is here the relevance of **data as a critical resource for the digital economy**, but also the tendency to expand specific services to a large number of individuals and users, particularly in the contexts of social media, but also large language models.[94]

Moreover, AI development depends on a complex global ecosystem of interconnected technological, economic, and physical infrastructures. The production of AI hardware, for example, **requires critical materials sourced globally, often from resource-rich countries in the Global South and other underrepresented regions,**[e,95] **but also major centers of chip manufacturing**. The manufacturing of semiconductors and chips, as well as the energy-intensive nature of AI systems, raises questions about sustainability and equitable resource distribution.[96] AI systems follow a **lifecycle that includes development, deployment, operation, and discontinuation**.[97] This lifecycle involves multiple stakeholders, from hardware providers and data suppliers to software developers and end users.[98] The complexity of these value chains often leads to **information asymmetries, accountability gaps, and varying safety standards**.

3.2. The Impact of AI on Human Rights and Beyond

Understanding the impact of AI on human rights requires analyzing it not only through the lens of international human rights law, but also touch upon fundamental norms rooted in the UN Charter, and

[e] While appropriateness of the term Global South is still debated for its tendency to generalize contexts and reinforce outdated dichotomies in the global system, we use the term here because of its focus on defining countries geopolitically by their political or cultural marginalization in the global system. This moves beyond just looking at differences in culture or levels of "development" to instead look at power relations and lack of inclusion (see endnotes 95).

international humanitarian law. **Impacts are multifaceted and can emerge through various channels**, including the context of use of an AI system, its technological characteristics, the outcomes of its decisions or recommendations, and the databases and physical supply chains that support its development.[99] This complexity means that **AI can influence virtually all human rights and, depending on its use case, intersect with other areas of international law**.

The Contextual Nature of AI Use

Given the nature of AI as a dual-use technology, both the context of AI use and its positive and negative impacts on human rights can vary significantly. Existing frameworks have therefore emphasized early on the **promotion of beneficence** and the **prevention of harm as foundational principles of AI ethics**.[100] Depending on the context, the purpose of AI can align with or conflict with the norms codified in international human rights law, but also the principles of the UN Charter and international humanitarian law.[101]

In many settings, AI can be beneficial to humanity, particularly in sectors where the capacities of AI systems surpass human performance or complement their work: The capacity of AI to analyze vast quantities of data rapidly offers significant potential for the progressive realization of human rights, also addressing wider societal challenges including demographic change, labor shortages, international development, and climate change.[102]

Particularly in healthcare, AI enhances medical research, the development of medical drugs, diagnostics, and treatment planning, while also providing assistive technologies for individuals with disabilities.[103] In humanitarian contexts, AI aids in disaster risk reduction, crisis preparedness, the search for missing or abducted individuals, the mitigation and prevention of pandemics, and even demining operations, potentially saving lives and protecting human lives in conflict zones.[104] Likewise, education constitutes another field of AI use with positive implications for human rights, with AI-driven platforms offering personalized learning experiences and allowing the inclusion of more people to education offerings.[105]

Furthermore, AI has the potential to drive economic growth and social development, especially in the Global South, through applications in telemedicine, agriculture, and resource management.[106] These **advancements can contribute to the realization of economic and social rights as articulated in the ICESCR or the Convention to the Right of Development**, as well as aims of international collaboration according to the UN Charter. The UN Resolution has also articulated here the view that **AI can be instrumental in addressing the global digital divide**, connecting AI to the right to development and social progress and illustrating the close connection between the different norms in international law in the case of AI.[107]

Apart from its benefits, AI presents significant human rights risks when used by both private and public sector actors, or other non-state actors such as organized crime groups, to engage in violations of protected norms. These risks are exacerbated in contexts where **incentive structures are misaligned with international human rights standards**. For example, reports have shown several instances of the use of AI-driven surveillance systems at the workplace at the expense of the right to privacy codified in Article 17 of the ICCPR[108]. Moreover, the business models underpinning certain AI systems may inherently violate human rights.[109] Recommender systems and personalized advertising, designed to maximize user engagement, can negatively affect exposed individuals, for instance those suffering from addiction or specific medical conditions.[110] In the context of social media, digital media, video games, and virtual realities, these algorithms heighten risks to children and adolescents, exposing them to inappropriate content, cyberbullying, and addictive behaviors.[111] Besides, they can also lead to the amplification of hate speech or discriminatory content on social media, due to the content prioritization by algorithms trained to maximize views or engagement.[112] Systems intended to influence behavior, such as those used in targeted advertising, raise additional concerns by potentially infringing on personal autonomy.[113] AI is also increasingly employed in creating non-consensual sexually explicit images and videos (deepfakes), disproportionately affecting women[114] and children[115]. Such technologies are also likely to enable new forms of conventional crime, as demonstrated by the use of false speech generation also referred to as "voice cloning" in online and offline fraud.[116] Addressing these challenges involves **upholding states' positive obligations to prevent human rights violations within their jurisdictions and mitigate the misuse of AI technologies**, but also understanding the nature of business models related to AI, data, and their structural implications for human rights.

The potential for AI driven harm also points to states' negative obligations under international human rights law, the UN Charter, and international humanitarian law. States may prioritize their economic, political, or security interests over their human rights obligations when under pressure. In addition, **AI might be deployed, not out of necessity, but with the explicit aim of consolidating power, suppressing dissent, and shifting power dynamics** to the detriment of human rights and other international legal norms.[117] The following examples are snapshots that illustrate how the potential intentions behind the use of AI may run counter to human rights and other international legal norms.

While **facial recognition technology** can serve beneficial purposes, such as locating missing persons, its use has drawn significant criticism, particularly for its role in **perpetuating racial discrimination**. This is especially evident when ethnicity or race is used to inform public security assessments or predictive policing measures.[118] Additionally, facial recognition has been employed in contexts of repression and racialized conflict, raising concerns under international humanitarian law and the Genocide Convention, depending on the exact repercussions of such systems for minorities.[119]

Another salient example of harmful AI use is **AI-driven disinformation campaigns**, which aim to undermine state sovereignty, and **destabilize international relations**.[120] These practices echo historical concerns about the implications of AI use on the UN Charter's prohibition of force (Article 2(4)). Similar risks are observed in the use of social media algorithms to disseminate war propaganda or incite racial hatred, violating Articles 20(1) and 20(2) of the ICCPR.[121]

In domestic settings, AI-facilitated disinformation is often used to weaken political opponents, further exacerbating political polarization.[122] Such disinformation campaigns also have profound human rights implications, particularly regarding the right to access information freely and without restriction, as stipulated in the International Covenant on Civil and Political Rights (ICCPR).[123] Practices such as microtargeting[124], **AI-reinforced disinformation campaigns**, and **deepfake technology** can discredit political opponents and **undermine democratic institutions**.[125]

AI-driven mass surveillance and espionage have also sparked public scrutiny due to their potential to violate international human rights law.[126] These practices can undermine the right to freedom from arbitrary arrest or detention (Article 9, Universal Declaration of Human Rights [UDHR]) and the right to privacy. One particularly controversial example is the use of **AI for social scoring systems**, which affects freedoms such as speech (Article 19, ICCPR) and depending on the design of the social scoring system also economic, social, and cultural rights.[127]

The deployment of AI raises also concerns in the context of law enforcement and the judiciary. This applies in specific to the use of **AI systems as interrogation techniques raises**, which would be critical from the perspectives of the International Bill of Human Rights (Article 7, ICCPR; Article 5, UDHR), but potentially also the Convention Against Torture (CAT). Controversial applications, such as AI-based **lie detection systems**, exemplify these risks.[128]

In military contexts, the use of AI raises substantial questions regarding compliance with international humanitarian law, particularly when **AI-driven weapon systems** are designed or used to target civilians or circumvent legal obligations to protect civilian populations during armed conflicts.[129]

Taken together, the **purpose behind deploying AI often determines its alignment—or conflict—with international human rights obligations** and other norms of international law. Notably, whether the deployment of AI constitutes a violation of principles under a specific framework depends more on the circumstances of its use than on the technology itself.[130]

Technical Features of AI Systems and Systemic Human Rights Impacts

Beyond the intent behind AI usage, structural risks to society can emerge from a human rights perspective, even without assuming malicious intent. These risks stem from technical features of AI, such as automated decision-making, data usage, algorithmic bias, and algorithmic opacity.[131] **The human rights implications of these risks vary by sector and context**, such as migration, social welfare allocation, healthcare, education, law enforcement, or the judicial practice.[132] These contexts can shape the potential impact on rights, including the right to asylum, the right to social security, the right to health, the right to education, and procedural rights in law enforcement and judicial contexts. They can also relate to specific conventions that are particularly relevant in specific use contexts, such as ILO standards on decent work and non-

discrimination in the employment context, or human rights frameworks on health, such as the Oviedo Convention on Human Rights and Biomedicine.[133]

Algorithmic decision making presents a core feature of many AI systems and can have profound structural implications for human rights. AI technologies in general imply a reduction in human oversight, potentially leading to unintended harm, diminished human control, and reduced capacity for human intervention to prevent adverse impacts.[134] This is particularly concerning given the imperfections of AI systems and the structural differences between artificial and human intelligence. Apart from this, the general shift in decision-making authority from humans to machines, while often voluntary, can significantly impact human rights, especially when implemented without informed consent or proper understanding of the AI system's functions and purpose.[135] The situation becomes particularly problematic for marginalized or underrepresented groups, such as children or disabled individuals, who may be unable to formulate consent to automated decisions affecting them, for instance when interacting with a chatbot or a non-human agent.[136] The concrete human rights implications of automated decision-making can be far-reaching, potentially affecting the rights to human dignity (UDHR Art. 1, ICCPR Art. 10), individual autonomy (UDHR Art. 2, 9), the right to life (UDHR Art. 3, ICCPR Art. 6) or the right to effective remedy (UDHR Art. 8, ICCPR Art. 2.3). This applies specifically in high-stakes domains such as healthcare, finance, and public administration, where AI-driven decisions can have significant decisions on individuals.[137]

Particularly in healthcare, AI-powered diagnostic tools and treatment recommendations may improve care quality, while constraining the autonomy of patients affected by relevant decisions such as medical intervention guided by an AI system.[138] Likewise, the introduction of AI in public administration raises questions, particularly when considering the relevance of rule of law and proportionality as safeguards for the protection of human rights.[139] Furthermore, the application of AI in the military domain raises critical questions from the perspective of international humanitarian law, particularly in the case of automated weapon use or AI use in the context of military decision making, which is discussed controversially from the perspective of the 1981 Convention on Certain Conventional Weapons.[140]

Consequently, the impacts of automation and unsupervised decision-making depend on the context of use. As pointed out in early ethics frameworks, the **irreversibility of AI-induced consequences constitutes an important marker here for the limits of automated decision-making**, as it prevents the meaningful implementation of the right to remedy. [141] This applies also to irreversible decisions which are not determined but significantly influenced by AI, particularly if these are time critical.[142]

Furthermore, the integration of AI into societal processes has raised concerns about **algorithmic discrimination**, also referred to as algorithmic bias.[143] The statistical nature of AI and its reliance on data can lead to systemic distortions of the model, so called biases, overlapping with and **potentially exacerbating pre-existing inequalities**. Biases can result from imbalanced training datasets, design choices, data collection methods, the use of discriminatory variables and labeling practices, as well as a **lack or underrepresentation of marginalized individuals or groups in data sets**.[144] These disparities are further magnified in global contexts, where underserved populations and indigenous communities face systemic underrepresentation in datasets.[145] Algorithmic discrimination has manifested across various domains, including recruitment, criminal justice, healthcare, education, and access to social services.[146]

In recruitment, for instance, biases in AI tools have disadvantaged individuals based on gender, race, or socioeconomic background.[147] They can also manifest in implicit and explicit discrimination.[148] Consequently, algorithmic bias impacts a wide range of rights articulated in the international bill of human rights (UDHR Art. 2, ICCPR Art. 26, ICESCR Art. 2), as the exact human rights implications of an algorithmic bias depend on the exact consequences for individuals, for instance a job application rejection (UDHR Art. 23, ICESCR Art. 6), university admission (UDHR Art. 26, ICESCR Art. 13) or the selection of individual for a specific medical treatment (UDHR Art. 25, ICESCR Art. 12). Similarly, biased criminal justice algorithms have led to disproportionate targeting of marginalized communities, undermining the procedural rights, such as the right to a fair trial (UDHR, Art. 11).[149]

Such biases are context-dependent and might relate to properties that are not covered in anti-discrimination law and can manifest, for instance in the case of AI in health, in unequal treatment resulting due to the medical condition of an individual.[150] Particularly in contexts such as social media, the **issue of bias is not confined to impacts on the individual level, but also might generate adverse impacts on the collective rights of religious institutions, political parties, and ethnic minorities**. For instance, biased

algorithms could unfairly represent or even censor content from political or religious organizations, undermining their ability to freely express and advocate their views.[151] In military AI, bias could result in disproportionate harm to civilians, leading to violations of international humanitarian law.[152]

Another issue which is closely related to algorithmic bias is **accessibility**. This is particularly evident in public transportation, where poorly designed human-machine interfaces can inadvertently exclude certain individuals from accessing services. For example, touch-screen ticket machines or automated entry systems on buses may pose significant challenges for people with visual impairments, motor disabilities, or cognitive differences.[153] Therefore, the implications of algorithmic discrimination extend to underrepresented groups, including individuals with disabilities, children, women, refugees, and those with low literacy skills.[154] Moreover, these systems can undermine the rights of ethnic minorities or stateless persons and jeopardize linguistic diversity, particularly when AI systems lack support for relevant minority languages.[155] **The issue of algorithmic discrimination**, understood as a broader concept than algorithmic bias and also encompassing accessibility concerns, **can not only give rise to new forms of unequal treatment but also perpetuate existing forms of direct, indirect, and intersectional discrimination**.[f,156]

The **usage of data**, whether structured (organized systematically for easy analysis) or unstructured (free-form content like text, images, and videos), serves as the foundation for AI systems.[157] This raises significant human rights implications, particularly regarding privacy, intellectual property, and collective rights. At the heart of these concerns lies personal data, defined as any information relating to an identified or identifiable natural person (names, location data, online identifiers, etc.).[158] The use of personal data in AI necessitates strict safeguards to protect individual privacy, enshrined in Article 12 of the Universal Declaration of Human Rights (UDHR) and Article 17 of the International Covenant on Civil and Political Rights (ICCPR).[159]

A particular issue is here the use of data in **neuro-technologies, specifically human brain-machine interfaces**.[160] The scope of privacy regulation, but even existing human rights frameworks such as the ICCPR, might not be wide enough to cover relevant data in this context, for instance brain waves. Furthermore, the **evaluation of data also raises particular concerns in the context of social media** in terms of their reliance on large-scale data collection that may have a chilling effect on freedom of expression (UDHR Art. 19, ICCPR Art. 19) and assembly (UDHR Art. 20, ICCPR Art. 21).[161] For instance, individuals may self-censor online due to fears that their content could be misused or misinterpreted by AI systems, but also because of the way algorithms prioritize content, leading to broader implications for democratic participation (UDHR Art. 21, ICCPR Art. 25).[162]

Large language models (LLMs), which often extract or are trained on which often scrape publicly available content online; intensify questions around of data privacy. Practices such as scraping can inadvertently capture sensitive information, from private correspondence to cultural expressions shared online. AI also poses significant risks to intellectual property rights.[163] By training on vast datasets that include copyrighted material, AI systems, particularly generative AI, may generate outputs derived from or closely resembling proprietary works. These issues, articulated under UDHR Art. 27, have prompted concerns over fair compensation and the protection of creators' rights.[164] Likewise, **intellectual property rights can take on a collective dimension**, particularly for indigenous peoples, and other marginalized communities.[165] Traditional knowledge, cultural practices, and language—often deeply intertwined with **communal identity**—are at risk of unauthorized use or exploitation. Without explicit consent, such practices can violate collective rights, potentially **erasing cultural context or misrepresenting traditions** but also religious beliefs, undermining the right to self-determination recognized in the UN Declaration on the Rights of Indigenous Peoples (UNDRIP).[166]

Algorithmic opacity, the inability to fully understand or trace the behavior of AI systems, poses significant challenges to human rights.[167] Many international frameworks emphasize transparency as a critical element in mitigating these challenges.[168] However, the **inherent complexity of non-deterministic AI systems**—relying on vast datasets, intricate statistical models, and adaptive algorithms—renders their decision-making processes inaccessible to human understanding. From a human rights perspective, this opacity impacts procedural rights such as those enshrined in Article 9 of the UDHR and ICCPR, including the right to an effective remedy (UDHR, Art. 8; ICCPR, Art. 9.5) and the right to an independent and impartial court

[f] In this context, it is also important to consider biases arising from the exclusion of traditional knowledge systems, such as Indigenous and other oral traditions, which are often overlooked in AI models (compare footnote: 156).

(UDHR, Art. 10; ICCPR, Art. 14).[169] **Stakeholders impacted by AI-driven decisions often struggle to understand or challenge them**, posing critical concerns in areas such as healthcare, human resources, and public administration where fundamental rights are at stake.[170]

In military applications, the consequences of opacity can be even more severe, as showcased by the use of lethal autonomous weapons in ongoing wars.[171] Here, the stakes involve not just individual rights but also the principles underlying international humanitarian law and the regulation of weapons under international conventions.[172] Furthermore, algorithmic opacity compounds issues like bias and robustness, leading to unintended consequences that obscure accountability. It complicates the attribution of harm to specific sources, especially in international AI operations that cross-jurisdictional boundaries or affect regions grappling with the digital divide.

Human Rights Impacts in the AI Value Chain

AI systems are not an isolated technology or an independent set of software solutions, they rely on a value chain that provides physical and data components, as well as human involvement in the training of systems and curation of models.[173]

For their operations, AI systems require a sophisticated array of **hardware components**, including specialized microchips, processing units, sensors and input devices, networking components, advanced memory systems, high-performance storage solutions, and cooling systems.[174] With these various hardware components, AI systems can effectively process vast amounts of data, learn from complex patterns, and make real-time decisions. The physical components of AI systems demand a variety of natural resources, primarily minerals and metals such as rare earth elements, silicon, copper, tin, tungsten and aluminum.[175] Semiconductors, critical for key AI components like processing units, require specific materials often sourced from regions with significant human rights concerns.[176] The situation in the Democratic Republic of Congo (DRC) is particularly concerning, with reports of with an ongoing war, population displacements, and **widespread child labor in cobalt and copper mines**.[177] Discussions at the ILO reveal that over 40,000 children in the DRC are engaged in mining, facing hazardous conditions and lacking access to education.[178] Recent lawsuit against enterprises involved in AI underpin the political relevance of this aspect.[179] Human rights issues appear also further downstream in the physical supply chain of AI, particularly when considering labor conditions and allegations of forced labor in the production of semiconductors and microchips.[180]

Moreover, the infrastructure required to maintain AI models—including the production of physical hardware and the operation of data centers—demands significant energy and water resources.[181] Estimating the environmental implications of AI remains challenging. However, by 2028, AI is projected to account for approximately 19% of data center power consumption.[182] Particularly the water use associated with large language models have come under scrutiny, leading to protests in regions such as Chile and Uruguay, where proposed data centers threaten local drinking water supplies.[183] This raises pressing questions about how AI-driven changes impact local communities and their access to vital resources with repercussions to the articulated right to a clean, healthy and sustainable environment.

The **data supply chain**, integral to the development of AI systems—including generative AI—carries profound human rights implications. As AI evolves, its reliance on diverse and representative datasets intensifies, often leading to the exploitation of marginalized communities, particularly in under-resourced regions. As pointed out earlier, practices such as data harvesting without informed consent or fair compensation exemplify "data colonization," wherein individuals and communities lose control over their data, which is commodified for profit.[184] This aligns with wider concerns raised in the scientific community with respect to data pollution, which describes the negative implications of data collection on the individual level and on communities.[185] This phenomenon is exacerbated by third-party organizations tasked with data collection, cleaning, and labeling, many of which neglect due diligence, exposing data subjects to heightened risks and undermining their fundamental rights.[186,187] Marginalized communities are disproportionately affected, often lacking equal access to the mechanisms to mitigate or protest these harms and address their consequences.

Furthermore, the processes of data curation—organizing, managing, and refining datasets for AI training—pose significant challenges with wide-ranging human rights implications. Workers in roles such as content moderation and data labeling often endure high-stress environments, exposure to traumatic material, and

insufficient mental health protections.[188] Reports on the situation of data labelers in Kenya, have revealed exploitative working conditions, inadequate pay, and exposure to psychologically damaging content.[189] These type of risks will only continue to grow as they are situated in a wider context of weak enforcement of labor rights in the digital economy.[190] **The growing integration of human-machine collaboration in training, maintaining, and curating AI systems further compounds these challenges, introducing significant human rights concerns for workers in oversight roles**. Content moderators, healthcare professionals, and employees involved in critical decision-making contexts are often subjected to high-stress environments, traumatic experiences, and limited autonomy to prevent or address harm.[191] International standards, including the ILO Declaration on Fundamental Principles and Rights at Work and Article 7 of the ICESCR, emphasize occupational health as a fundamental right, yet these protections are frequently ignored in the context of AI labor.

Understanding the impact of AI on human rights is a multifaceted challenge. AI is a complex, versatile technology with applications spanning numerous domains and involving diverse stakeholders throughout its lifecycle, from development to deployment. Its effects are shaped by factors such as the physical components it relies on, energy demands in data centers, developers' design choices that may lead to adverse human rights outcomes, and the overarching purpose of the deployed models. These intertwined variables make it inherently difficult to provide a comprehensive assessment of AI's human rights implications.

Nonetheless, a clear pattern emerges that **AI has the potential to affect all human rights codified in the International Bill of Human Rights, as well as provisions in specialized instruments**. These include frameworks aimed at protecting underrepresented or marginalized populations and addressing specific contexts, such as the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and the Convention on the Rights of the Child. The far-reaching implications of AI underscore its capacity to influence rights across diverse domains. In practice, disentangling the human rights implications of AI from other areas of international law can be complex. For instance, international humanitarian law and principles in the UN Charter often intersect with human rights concerns, as seen in cases of ethnic hatred, incitement on social media or the propagation of war-related propaganda.

These examples illustrate how human rights violations connected to AI may simultaneously invoke broader legal and ethical considerations. Addressing these challenges demands a holistic perspective on the harms AI can cause. **Such an approach requires analyzing AI's impact not only on individuals but also on groups, societies, nations, and even the planet as a whole**. This comprehensive view goes beyond examining AI's role in supporting human rights; it emphasizes understanding and mitigating the broader risks and harms AI may introduce.

4. The Regulatory Landscape of AI and Human Rights

The AI regulations can be influenced by diverse legal and ethical frameworks (see Appendix 2), shaped by varying priorities, geographic contexts, and levels of enforceability. Notably, these frameworks often reflect a Western-centric perspective, with Europe and North America playing dominant roles. However, the ongoing international debate highlights a growing recognition of the global societal impacts of AI and signals the potential for consensus on a binding international convention grounded in human rights and other principles of international law.

Early Ethics Frameworks: Laying the Groundwork

Early approaches to AI governance **emphasized ethical principles, focusing on human autonomy, privacy, explainability, and non-maleficence**. Influential examples include AI4People, the High-Level Expert Group on AI (HLEG AI), the OECD AI Principles, the Beijing AI Principles, the IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems, the UK AI Principles, the Asilomar AI Principles, and the Montreal Declaration.[192] In particular, the **UNESCO Recommendations on the Ethics** of Artificial Intelligence became the first globally recognized normative instrument on AI ethics with **strong references to international law and human rights**, while also including the environmental effects of AI.[193] Some of the mentioned frameworks include concrete provisions to prevent harmful AI practices, **such as bans on AI-based social scoring, mass surveillance purposes, lethal autonomous weapons, and non-consensual manipulation of human behavior**.[194] Private-sector contributions to AI ethics included companies like Google, IBM, and Mercedes, with Google notably abstaining from military AI projects.[195] These early frameworks evolved incrementally, inspiring standardization efforts by standard-setting organizations such as IEEE, UN ITU, and ISO.[196]

The Shift Towards Comprehensive AI Regulation

Ethical frameworks laid the groundwork for subsequent regulatory initiatives, including a broad spectrum of data privacy regulations, comprehensive AI governance frameworks, sector-specific legislation, supply chain-related initiatives, and the adaptation of existing legal structures to address AI-specific challenges. The HLEG AI's Ethics Guidelines for Trustworthy AI, for example, linked ethical principles with fundamental rights, influencing the EU AI Act.[197] Similarly, the 2019 report of the German Data Ethics Commission proposed differentiated levels of algorithmic risk, including unacceptable risks and prohibitions on specific AI practices, which later became major structural components of the act.[198]

The **initial wave of regulation targeted data protection**, heavily influenced by the General Data Protection Regulation (GDPR), which addresses automated decision-making under Article 22. GDPR's influence extended globally, inspiring frameworks such as California's Consumer Privacy Act, Brazil's General Data Protection Law, and India's Digital Personal Data Protection Act.[199] **These laws codified individual rights**, including the **right to be forgotten, deleted, or corrected**. Regional conventions, some of them predating the GDPR, such as the Council of Europe's Convention 108+, further underscored the connection between data protection and AI governance.[200] However, these frameworks fell short in addressing broader AI-specific harms, such as algorithmic discrimination or adverse impacts arising in the context of machine learning.

Recognizing these gaps, nations like Singapore and Greece, but also subnational entities such as Dubai have enacted **comprehensive AI-specific laws or governance frameworks**.[201] Greece's Law on Emerging Technologies (4961/2022)[202] highlights fundamental rights and workplace AI applications. The EU AI Act **prohibits certain AI practices**, including real-time remote biometric identification systems in publicly accessible spaces (with limited law enforcement exceptions), AI systems that exploit vulnerabilities or use subliminal manipulation, and social scoring systems. It also regulates **high-risk AI applications** in domains such as critical infrastructure, education, employment, and access to essential services. Similar risk-based approaches are unfolding globally with Brazil's proposed AI legislation, Thailand's draft Royal Decree on AI System Service Business, and South Korea's Act on the Development of Artificial Intelligence and Establishment of Trust. These **frameworks share a commitment to fundamental rights** and their understanding of algorithmic harm in terms of algorithmic decision making, algorithmic bias, data use, and opacity while reflecting jurisdictional differences in priorities and risk tolerance.

Sector-specific laws complement comprehensive regulations, targeting areas such as recruitment (e.g., New York's Law 188), **autonomous vehicles** (e.g., Germany's Act on Autonomous Driving), and **online**

content moderation (e.g., the EU's Digital Services Act, Brazil's Bill No. 2630).[203] A significant legal development in AI governance is the legislation of neurorights in Chile. In 2021, Chile became the first country to pass a **constitutional amendment protecting neurorights**, specifically the **right to mental integrity**.[204] This was followed by a landmark ruling from the Chilean Supreme Court in 2023, which further clarified the protection of mental integrity in the context of neurotechnology and AI.[205] Furthermore, existing legal structures, including anti-discrimination laws[206], consumer protections, and medical device regulations, are increasingly adapted to mitigate AI-related risks. Concrete steps include for instance, updates of EU Medical Device Regulation, guidance of the U.S. Federal Drug Administration on AI, new requirements for health care organizations and insurers to address algorithmic impacts or efforts to anchor **algorithmic discrimination specifically in anti-discrimination legislation**.[207]

Supply chain legislation, such as the EU's Corporate Sustainability Due Diligence Directive (CSDDD) and Germany's Supply Chain Act, plays a further crucial role in AI governance.[208] These **frameworks address general human rights risks in international supply chains**, including those relevant to AI. However, they remain **too broad and nonspecific**, failing to address the unique challenges posed by AI-driven supply chains. The academic community, along with organizations like the OHCHR and the UN Global Compact, has called for a **sharper focus on AI-specific risks in supply chains**, including ethical sourcing of data and materials critical to AI systems.[209]

Moreover, the recent withdrawal of key states from AI regulation, such as the United States revoking its executive order on AI, raises significant concerns.[210] This development underscores the urgency of establishing a common minimum standard for AI governance, given its various channels of adverse impact on human rights.

Integrating Human Rights into Global and Regional AI Governance

Parallel to national efforts, international and regional organizations have made strides in harmonizing AI governance. A pivotal moment occurred in 2024 with three major developments: the adoption of the Framework Convention of the Council of Europe on Artificial Intelligence, Human Rights, Democracy and Rule of Law[211], the first AI-specific resolution of the UN General Assembly[212], and the Global Digital Compact.[213] While reshaping the dynamics of global AI governance, the implications of the stated documents differ, pointing at different international perspectives on global AI governance.

The *Framework Convention of the Council of Europe* constitutes the first **legally binding framework in international law**, which aligns AI systems with **human rights, democracy, and the rule of law**, drawing heavily on the EU AI Act. It employs a **risk-based regulatory approach**, enforces transparency through content labeling, and strengthens accountability with documentation and redress mechanisms. Despite its comprehensive scope, it has faced criticism for excluding certain issues, such as autonomous weapons and group-specific effects beyond children and individuals with disabilities, in spite of ongoing discussions on these matters.[214] Moreover, **its territorial limitations leave cross-border AI impacts** and **multinational corporate operations unregulated**.

Other regional organizations including the Organization of American States and the African Union have engaged in the debate on AI and human rights, both **pointing out at the relevance of human rights in a wider context of security, peace and development**. The African Union has also advanced AI governance with a specific focus on collective rights, self-determination, and regulating lethal autonomous weapons. Resolution ACHPR/RES. 473 (EXT.OS/XXXI) 2021 explores the **implications of AI on individual and collective rights**, reinforcing the need for inclusive and equitable governance.

Apart from the regional organizations, the *United Nations* have become increasingly active in human rights in AI governance. The UN General Assembly 2024 Resolution A/78/L.49, titled "Seizing the opportunities of safe, secure and trustworthy artificial intelligence systems for sustainable development" represents a landmark effort to integrate disparate regulatory trends.[215] Although non-binding, the resolution explicitly references the UN Charter, the Universal Declaration of Human Rights, and the UN Guiding Principles on Business and Human Rights, also **addressing positive contributions of AI to sustainable development**. Furthermore, the resolution also highlights the **digital divide and the importance of equitable AI governance**, particularly for populations in the Global South, connecting to earlier concerns raised by international stakeholder.

Moreover, the UN General Assembly has also addressed the challenges and **concerns raised by new technological applications in the military domain**, including those related to AI and autonomy in weapons systems in Resolution L.77.[216] While **no binding treaty has been agreed upon**, there have been ongoing discussions and resolutions calling for international regulations on lethal autonomous weapons systems (LAWS) under the Convention on Certain Conventional Weapons.[217] This call for prohibiting such systems has been strongly articulated by various stakeholders including the International Committee of the Red Cross[218] and faith-based institutions such as the World Council of Churches.[219]

Meanwhile, the *Global Digital Compact* integrates AI-related objectives into its broader vision of a digitally inclusive future.[220] This initiative aims to create a **roadmap for international cooperation on digital governance**, with a focus on universal internet connectivity, equitable access to digital public goods, inclusion for marginalized populations, the realization of gender equality in the context of AI, capacity-building in digital competencies, and **the protection of human rights amid digital transformation**. Besides, the Global Digital Compact explicitly pointed at "**hate speech** and **discrimination**, **misinformation** and **disinformation**, **cyberbullying** and **child sexual exploitation and abuse**" as key issues to be addressed within the context of international AI governance.[g][221]

Despite advancements in AI governance, particularly in addressing algorithmic harms and identifying prohibited practices, significant gaps persist. A common cause for these gaps is a lack of consensus or common convention on the human rights impacts of AI. **The adoption of a binding international convention on AI based on human rights and international law principles at the UN level could fill these gaps**.

Current frameworks inadequately address the rights of underrepresented or marginalized populations including indigenous peoples and individuals in the Global South, where the digital divide exacerbates inequalities in access to and benefits from AI technologies. Additionally, cross-border AI impacts and the human rights implications of AI-driven supply chains are underregulated, with insufficient attention to labor conditions. Military and defense applications of AI, including lethal autonomous weapons, and their potential human rights consequences are similarly neglected in binding instruments under international law. **To bridge these gaps, a comprehensive international framework is urgently needed**.

The A/78/L.49 Resolution of the General Assembly presents a critical starting point, emphasizing the UN Charter and the Universal Declaration of Human Rights as foundational references. This resolution underscores the need for equitable AI governance and explicitly highlights the digital divide's impact on marginalized populations, particularly in the Global South. By integrating principles from the UN Guiding Principles on Business and Human Rights and aligning with earlier resolutions on autonomous weapons, **the UN is pointing toward a more cohesive approach that respects both international human rights and humanitarian law**, but concrete action is still needed.

g The precise definitions of terms such as hate speech, misinformation, and disinformation require careful consideration, particularly given the complex debate on balancing freedom of opinion and expression with the need to protect individuals from online discrimination. (see endnote 221)

5. The Need for a Convention on AI, Data and Human Rights

Given its immense potential for both benefit and harm, a cohesive global approach to AI governance—anchored in a binding international convention grounded in human rights—is imperative, particularly considering AI's global effects. Historically, international law has effectively addressed similar challenges, including prohibitions on certain weapons, the regulation of conduct in warfare, combating structural injustices and slavery, mitigating humanitarian crises and the resolution of international conflicts and finally the **regulation and governance of technologies that pose risks to international peace and human rights**. A cornerstone of this effort has been the **emergence of international human rights law**, recognizing the inalienable rights of individuals as articulated in the Universal Declaration of Human Rights and later extending protections to underrepresented or marginalized groups such as children, women, individuals with disabilities, refugees, and indigenous peoples.

Due to these **observed gaps in global AI governance**, the development of a convention on AI, data, and human rights that builds upon past traditions in international law and integrates emerging international perspectives on AI's diverse impacts is proposed in this Whitepaper. Many of these impacts have already been articulated with ethical frameworks, legislation, UN resolutions, and approaches of regional organizations including the Council of Europe and the African Union, but there remains a **need for a human rights-focused convention on AI**.

The proposed convention aims to pave the way to a binding international agreement, which extends the protection of human rights to the realm of AI, and addresses the wider societal, economic, and political implications of this technology. Another objective is to prevent a further fragmentation in AI and data-specific regulations, since many nations have not engaged in AI-specific legislation yet. Furthermore, dealing with AI governance only on a domestic or regional level ignores the global nature of AI and the global importance of international law and human rights, leaving out important issues like **indigenous rights**, human rights and environmental issues in **AI supply chains** or global **digital divides** that can only be meaningfully **addressed in a global framework**.

The following passage sheds light onto the underlying considerations that are pertinent when engaging in global human rights-based framework on AI that is grounded in the tradition of the UN Charter and international human rights law. These considerations have comprehensively been embedded in the proposed *Munich Convention on AI, Data, and Human Rights*:

> *Integration within the existing body of international law:*
>
> Current approaches to AI regulation at national and regional levels typically focus on individual harms, emphasizing rights such as dignity, equality, and remedy. However, given the wide applicability of AI, its impact on human rights extends beyond these specific concerns, varying according to the sector and context in which it is used. Additionally, AI's effects may not only influence civil, political, economic, social, and cultural **rights codified in the International Bill of Human Rights** but also collective rights, particularly the rights of indigenous peoples.
>
> Given the global environmental impact of AI and data use, a binding framework should address the **human right to a safe, clean, healthy, and sustainable environment**, as well as the **emerging human rights responsibilities of business enterprises**, which are increasingly influential in the AI landscape. This comprehensive approach is crucial not only for addressing the complex challenges posed by AI technologies but also for ensuring that the **level of human rights protection associated with AI remains consistent with that of non-AI contexts**, aligning with earlier viewpoints articulated in the UNESCO Recommendations on the Ethics of Artificial Intelligence, as well as the pertinent resolutions of the Human Rights Council.
>
> *Consideration of positive and negative human rights obligations*
>
> A key component of any convention on AI should involve addressing the role of states as bound by human rights under international law and establishing binding frameworks to close existing gaps in the protection of human rights in the context of AI. This requires a comprehensive understanding of human rights, encompassing both the **positive and negative obligations of states under international human rights law,** including their duty to prevent the incitement of

ethnic, racial or sectarian hatred under international law. Depending on their specific political set-up, states may need to adopt **legislation, administrative measures, or even constitutional changes** to address AI-specific risks effectively, in their respective jurisdictions but also in the wider AI value chain. This requires not only efforts towards AI-specific regulation, but also the adaptation of existing consumer protection frameworks, liability regulation, administrative law, product safety, data privacy framework, legal frameworks regulating social media or supply chain legislation to account for adverse impacts created by AI.

Inclusion of the Purpose of AI in the Convention

The potential of AI for both beneficial and harmful applications necessitates the integration of the **purpose of AI use and deployment in the scope of a convention**, particularly to prevent downstream misuse risks. A binding convention should therefore oblige states to support AI development in areas that promote human rights, such as clean energy, education and healthcare, while ensuring that AI benefits are equitably distributed. States must also take action to address the risk of excluding certain countries or groups from these AI advancements, recognizing disparities in digital infrastructure, technological access, and financial resources that contribute to the **global digital divide**, potentially including this angle in development aid, international collaboration, technology transfer and research. At the same time, a binding convention should oblige states **to prohibit AI applications that inherently conflict with the UN Charter and international human rights law**. This might include AI systems enabling **cybercrime and misinformation**, inciting ethnic, racial or sectarian hatred, inducing **racialization of individuals**, undermining personal autonomy and dignity particularly when **creating non-consensual sexually explicit images**.

Considering structural features of AI:

AI technologies share certain structural characteristics—**algorithmic opacity, bias, its capacity to make decisions, and data dependence**—that pose significant human rights challenges. A binding convention should therefore oblige states to take measures to **engage in a comprehensive approach on AI considering these structural features**, while ensuring human oversight, and establishing transparency and accountability as principles mitigating or preventing these structural harms. This involves identifying areas where the use of AI necessitates specific precautions and practices to prevent violations of norms established in international human rights law, for instance by addressing the issue of liability for adverse impacts in the context of AI. Such areas include sectors, contexts, and use cases of artificial intelligence systems that **require specific attention (high risk AI)**, particularly in healthcare, occupational safety, employment, education, jurisprudence, law enforcement, public administration, and critical infrastructure. The use of AI in the context of **irreversible decisions** warrants further attention, particularly in the contexts, where the life of individuals is at stake. Likewise, the **inseparable relationship between AI and data** must be considered within the measures taken by states, particularly in order to prevent the erosion of rights linked to privacy through the increased use of AI in society. This applies also to the risks of **adverse effects of human machine interaction** on mental health. Furthermore, a binding convention must address the broader structural human rights impacts associated with the development and use of AI **throughout its supply chain**. This includes the negative effects on individuals involved in content moderation, as well as on communities affected by the sourcing and use of natural resources required not only for the creation but also for the ongoing maintenance of AI systems.

Definition of algorithmic rights:

The rise of AI has increased the demand for robust individual rights protections, particularly regarding concerns such as algorithmic decision-making, opacity, and bias. A binding international convention should oblige states **to ensure that individuals can opt out of AI systems, understand algorithmic decisions impacting them, and seek remedies for and be able to contest unjust outcomes**. Additionally, states should consider ensuring the **right to be notified of algorithmic decisions** and **the right to be forgotten** in their measures. Furthermore, the growing potential of AI to analyze and alter human neuronal activity calls for specific provisions related to individual rights under the emerging concept of **neurorights**, addressing concerns about

the intersection of AI with personal mental and cognitive integrity. Moreover, it is essential for the convention to oblige states to **recognize the symmetry between algorithmic rights and the technical realization of principles underlying AI governance**, particularly in mitigating, preventing, and redressing algorithmic harm through human oversight and intervention. This symmetry must align with duties imposed on both the private and public sectors to establish the necessary technological and organizational conditions for protecting and realizing these instrumental rights. To this end, **traceability** and **accountability** for algorithmic harm should be fundamental features of any binding convention on AI, alongside targeted measures to ensure their effective implementation.

Addressing Global Character of AI Operations:

The **global nature of AI research, development, and deployment** means that national regulatory approaches, which primarily address algorithmic harm within their own jurisdictions, are insufficient to tackle the international human rights implications of these technologies. Multinational companies, in particular, may fail to adequately address human rights risks in their global AI operations, leading to **unequal treatment of individuals across different regions and cultural, developmental, economic and social contexts**. A binding international convention should therefore oblige states to hold **multinational companies including social media providers accountable for adverse human rights** impacts arising from their AI deployments on a global scale. Furthermore, certain marginalized groups, such as **indigenous peoples**, require special attention, as their rights must be understood not only as **individual but also as collective rights**. Existing binding frameworks related to AI, particularly those in the Global North, exemplified in the Framework Convention of the Council of Europe or the EU AI Act fail to protect these groups adequately. The convention should therefore prioritize the protection of such groups and oblige states to **ensure their voices and rights** are adequately represented and addressed within AI-generated content. An international convention should therefore foster **cross-jurisdictional codes of conduct for organizations involved in AI**.

5.7. Evolving character of a convention on AI and human rights:

The ongoing debates have already shed light on several structural issues related to the negative impacts of AI on human rights. However, **certain long-term dynamics may remain underexplored**. In particular, the **economic, political, and social shifts, but also long-term mental health effects** that AI could bring about might conflict with international human rights law as well as the principles and values articulated in the UN Charter. Additionally, **emerging AI technologies and developments in research**, for instance in the context of neurosciences or quantum computing, could give rise to new use cases that present further risks to human rights or make specific dual use technologies more accessible, potentially amplifying the aforementioned challenges. Given the evolving nature of AI and its long-term consequences, the **convention must be viewed as a living document, capable of addressing unforeseen human rights challenges**. Regular updates should reflect advances in AI-related fields, such as healthcare, mental health and neuroscience, while adapting to emerging risks. This unpredictability surrounding the long-term impacts of AI highlights the **need for general clauses within a binding convention**, including the definitions of **prohibited practices** and **high risk AI, as well as the role of enforcement mechanisms to address emerging algorithmic risks early on**. Continuous monitoring and investigation of adverse impacts by an independent body in the form of a **special rapporteur on artificial intelligence, data and human rights** will be critical to refining the convention over time. Therefore, establishing the necessary infrastructure to enforce the provisions of the convention is vital.

While these concepts represent distinct pillars of the convention, they should be viewed as **mutually reinforcing and interdependent elements of a human rights approach on AI governance**.

6. An Action Agenda for Human Rights in the Age of AI

The transformative impact of artificial intelligence (AI) and its implications for the norms codified in the Universal Declaration of Human Rights necessitate an urgent discussion on the development of a binding convention that situates human rights within a broader set of norms in international law. **Binding conventions do not stand in isolation, but are mutually reinforcing elements of a comprehensive AI governance framework**. The primary aim is not to establish new rights but **to extend existing human rights protections to AI technologies**, which are fundamentally reshaping human interactions and societies. Moreover, AI poses holistic challenges to human rights, and a global, human rights-centered convention is essential for addressing these challenges from a unified perspective, rooted in the principles of the UDHR and the UN Charter.

The following section addresses why the UN Human Rights Council (UNHRC) is the right forum to engage in such a debate, why it is critical to act soon, and how intermediate steps could look like in realizing the convention.

The **UNHRC is uniquely equipped to spearhead the initiative for a global, binding convention on AI** and human rights. Its mandate, articulated in UN General Assembly Resolution 60/251, empowers it to promote "universal respect for the protection of all human rights and fundamental freedoms for all." Furthermore, the UNHRC's role has been acknowledged in the Global Digital Compact, which recognizes "the role of the Human Rights Council, within its existing mandate, in fostering an inclusive, open, safe, and secure digital space for all."[222] This mandate uniquely positions the UNHRC to lead the global discourse on the human rights implications of AI. Unlike regional organizations or national governments, the UNHRC's inclusive nature and extensive reach enable it to reconcile diverse legal systems, cultural norms, and perspectives. This inclusive perspective is critical not only to addressing the interdependence between international human rights law and other norms of international law, but also to anchoring these norms within a framework capable of transcending regional or national constraints.[h]

The **UNHRC has a proven track record of engaging in such comprehensive efforts**. Notably, the UN Guiding Principles on Business and Human Rights (UNGPs), adopted through Resolution 17/4, have had a profound impact on human rights. The UNGPs **successfully unified diverse perspectives**, including international human rights law and international humanitarian law, creating actionable principles for business enterprises. Similarly, the UNHRC's work on genocide prevention within a human rights framework (Resolution 55/13) and its articulation of the right to a clean, healthy, and sustainable environment in Resolution 48/13 demonstrate its ability **to situate human rights-focused conventions within the broader, interdependent landscape of international law**.

The **intersection of AI and human rights has gained significant momentum**, presenting an opportune moment for the UNHRC to act. Recent developments include the adoption of UN General Assembly Resolution A/78/L.49, titled "Seizing the Opportunities of Safe, Secure, and Trustworthy Artificial Intelligence Systems for Sustainable Development," and the Council of Europe Framework Convention on Artificial Intelligence, Human Rights, Democracy, and the Rule of Law. **Additionally, the UN General Assembly has articulated the need to regulate the use of lethal autonomous weapons** based on the UN Charter, international humanitarian law, laying the foundation for a global discussion on AI use in armed conflicts. The most recent debates within the UN Digital Compact further highlight the **growing awareness of AI's structural impact on human rights and sustainable development**. Delays in action therefore could increase the costs and challenges of implementing effective global governance for AI and reinforce the fragmentation in global AI governance.

A first step in the ultimate goal of promoting a convention should involve the **adoption of a UN General Assembly Resolution** outlining the foundational principles and elements of such a convention. This resolution would serve as a **pivotal intermediary, providing a framework for international cooperation** while paving the way for a comprehensive, legally binding agreement. By articulating key normative elements—such as prohibitions on harmful AI practices, protections for marginalized groups, and mechanisms to promote accountability—a resolution would **create momentum for broader international consensus**. This approach aligns with international law precedents, where **non-binding**

[h] For instance, the revocation of Executive Order 14110 in the United States, which emphasized the safe, secure, and trustworthy development and use of artificial intelligence, highlights the risks of relying solely on national governments or regional organizations.

resolutions have played an influential role in shaping human rights norms through customary international law. For instance, the recognition of the right to a clean, healthy, and sustainable environment through Resolution 48/13 has driven global discourse and policy despite its non-binding nature.

When initiating the work on a global convention dedicated to AI and human rights, the UNHRC should **prioritize the following thematic areas** in the efforts to ultimately guide the process towards a binding convention:

- Promotion of the **use of AI to identify and provide evidence for abuses of human rights** by member states
- **Prohibition of AI practices** that violate international human rights law.
- Identification of **high-risk areas** requiring heightened scrutiny and protection.
- Discussion on the **intersection of human rights with other domains of international law** in the context of AI.
- Definition of **algorithmic rights and relatedly neurorights** in the context of AI and mechanisms for their realization globally.
- Development of strategies to address jurisdictional challenges in AI and mitigate its cross-border impacts, particularly those arising from multinational corporations.
- Protection for **underrepresented and marginalized groups as well as individuals living in the Global South and other underrepresented regions**, affected by the digital divide.

Interoperability guidance to foster dialogue and alignment with emerging regional frameworks, as well as key developments in international humanitarian law on lethal autonomous weapons but also the implications of AI for the norms articulated under the UN Charter, particularly for multinationals operating across diverse regulatory environments. By considering these areas of interest, the UNHRC can leverage its **mandate to serve as a forum for dialogue on these thematic issues** by engaging with a wide range of stakeholders. This encompasses collaboration with other UN bodies, the UN Secretary-General's Tech Envoy, and agencies such as UNESCO, the International Telecommunication Union (ITU), and the UN Conference on Disarmament; regional organizations like the Council of Europe, the African Union, the Organization of American States, and ASEAN; intergovernmental organizations such as the OECD; faith-based organizations, including the World Council of Churches and the Islamic Organization of States; humanitarian organizations like the International Committee of the Red Cross; legislative and policy forums such as the Inter-Parliamentary Union (IPU); civil society and advocacy groups; the scientific and research community; private sector and technology leaders, including the UN Global Compact; representatives from youth organizations, indigenous communities, and other underrepresented or marginalized populations directly impacted by AI; as well as standard-setting organizations like ITU, ISO, and IEEE. Furthermore, ensuring the **active inclusion of voices from the Global South, underrepresented regions, and indigenous peoples** is crucial to realize a holistic perspective on a binding convention.

The UNHRC is uniquely positioned to lead the development of a comprehensive, globally inclusive framework for AI and human rights. Whether through a binding convention, a UN Resolution, or a combination of both, the **UNHRC must act decisively to address the challenges and opportunities posed by AI**. Such actions will ensure the responsible development and use of AI while safeguarding the fundamental rights and freedoms of all individuals worldwide.

7. Concluding Remarks

The international community stands at a pivotal juncture. With the advent of digital technologies and the widespread use of data and the internet, AI has become increasingly relevant in domains critical to human rights, but also to the norms articulated in the UN Charter. Automated decision-making, driven by statistical models that often operate beyond the full understanding and control of users, raises significant concerns in terms of human accountability and the traceability of errors. Moreover, the growing interaction between humans and machines poses questions about how technology transforms humanity itself, including the risks of human misjudgment and misunderstandings regarding the capabilities and limitations of AI. The increasing importance of data has major implications for business models and economic structures. The same technologies also allow for new forms of public surveillance. Therefore, this wider change encompasses not only application of AI across economic sectors and functions, but also profound implications for societal structures, including administrative, political and military decision-making, as well as international relations.

The **proposed Convention (drafted as the "Munich Convention on AI, Data, and Human Rights") represents a holistic approach to addressing these issues**. It recognizes that human rights, grounded in principles of human dignity, self-determination, and equality, are not static but evolve over time, often shaped by historical experiences. They form also part of a broader, interconnected framework of international law, which articulates the condemnation of wars of aggression, the promotion of peace and sustainable development as values underpinning international relations.

While international law is imperfect, it has driven significant progress, such as the prohibition of specific weapons, coordinated responses to humanitarian crises, and the abolition of slavery and child labor. **Addressing the challenges posed by AI demands a comparable international effort**, given its potential for misuse, structural human rights impacts, and the global interdependencies arising from its widespread use.

The UN Human Rights Council (UNHRC) was established with the mission of guiding the conversation on such critical issues. AI holds immense potential as a force for good but also presents substantial risks to human rights. While discussions on AI and human rights are gaining momentum, they remain fragmented. Given AI's global impact, a cohesive international dialogue is imperative—an effort already supported by recent UN General Assembly resolutions and the ongoing work of the UNHRC. By addressing the challenges, recommendations, and perspectives outlined in its white paper, **the UN Human Rights Council can, in collaboration with other organizations, lead the global debate on AI and human rights**. The UNHRC's previous initiatives have demonstrated its capacity to effect significant change. The timing is crucial, as AI's capabilities continue to expand and the UNHRC is uniquely positioned to forge an international consensus on this issue.

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Appendix 1. Overview of Major Human Rights Instruments

Pivotal events, Intellectual movements, and Contributions in the History of Human Rights and Peace:

- Edicts of Ashoka (3rd century BCE)
- Iroquois Great Law of Peace (12th century)
- Magna Charta Libetratum (1215)
- Charter of Manden (13th century)
- Twelve Articles of the Peasants (1525, Memmingen)
- Peace of Augsburg (1555)
- Hugo Grotius' On the Law of War and Peace (1625)
- Treaty of Westphalia (1648)
- John Locke's Two Treatises of Government (1689)
- English Bill of Rights (1689)
- Jean-Jacques Rousseau's The Social Contract (1762)
- US Constitution and Bill of Rights (1787-1791)
- French Declaration of the Rights of Man and of the Citizen (1789)
- Immanuel Kant's Perpetual Peace: A Philosophical Sketch (1795)
- Haitian Constitution of 1801
- Formation of the Red Cross (1863)
- First Geneva Convention (1864)
- St. Petersburg Declaration (1868)
- Leo Tolstoy's The Kingdom of God is Within You (1894)
- First Hague Peace Conference (1899)
- Joseph Conrad's Heart of Darkness (1899)
- Drago-Porter Convention (1907)
- Hague Convention of 1907
- Porter Convention at the Second Hague Conference in 1907
- Woodrow Wilson's Fourteen Points (1918)
- League of Nations Covenant (1919)
- Foundation of the International Labor Organization (1919)
- Charter of the United Nations (1949)
- Geneva Conventions (1949)
- Declaration on the Promotion of World Peace and Cooperation (1955)
- Martin Luther King Jr.'s Letter from Birmingham Jail (1963)
- Helsinki Accords (1975)
- Declaration on the Right to Development (1986)
- Rome Statute of the International Criminal Court (1998)

International Instruments:

- Universal Declaration of Human Rights (1948)
- Convention of the Prevention of Genocide ()
- International Covenant on Economic, Social and Cultural Rights (1966)
- International Covenant on Civil and Political Rights (1966)
- Convention on the Elimination of All Forms of Racial Discrimination (1965)
- Convention on the Elimination of All Forms of Discrimination against Women (1979)

- Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (1984)
- Convention on the Rights of the Child (1989)
- International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families (1990)
- International Convention for the Protection of All Persons from Enforced Disappearance (2006)
- Convention on the Rights of Persons with Disabilities (2006)
- UN General Assembly Declaration on the Right to Peace (2016)

Regional Instruments:

- European Convention on Human Rights (1950)
- American Convention on Human Rights (1969)
- African Charter on Human and Peoples' Rights (1981)
- Arab Charter on Human Rights (2004)
- ASEAN Human Rights Declaration (2012)

Relevant ILO Instruments:

- ILO Declaration on Fundamental Principles and Rights at Work (1998)
- ILO Convention No. 29 on Forced Labour (1930)
- ILO Convention No. 87 on Freedom of Association and Protection of the Right to Organise (1948)
- ILO Convention No. 98 on the Right to Organise and Collective Bargaining (1949)
- ILO Convention No. 100 on Equal Remuneration (1951)
- ILO Convention No. 105 on the Abolition of Forced Labour (1957)
- ILO Convention No. 111 on Discrimination (Employment and Occupation) (1958)
- ILO Convention No. 138 on Minimum Age (1973)
- ILO Convention No. 182 on the Worst Forms of Child Labour (1999)
- Indigenous and Tribal Peoples Convention (ILO 169) (1989)

Bioethical frameworks:

- Universal Declaration on Bioethics and Human Rights (UNESCO, 2005)
- Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine (Council of Europe, 1997) -

Appendix 2. Overview of Relevant Frameworks

Ethical Frameworks*:*

- UK Principles of Robotics (2011)
- Partnership on AI's Tenets (2016)
- IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems (2016)
- Asilomar AI Principles (2017)
- Google's AI Principles (2018)
- AI4People's Ethical Framework for a Good AI Society (2018)
- Montreal Declaration for Responsible AI Development (2018)
- Beijing AI Principles (2019)
- EU Ethics Guidelines for Trustworthy AI (2019)
- OECD AI Principles (2019, updated 2024)
- Governance Principles for a New Generation of Artificial Intelligence (China, 2019)
- IEEE Ethically Aligned Design (EAD) (updated 2019)
- UNESCO Recommendation on the Ethics of Artificial Intelligence (2021, last updated 2024)

Regulation on the National / Supranational Levels*:*

- Australia: Online Safety Act (2021)
- Argentina: Personal Data Protection Law (2000)
- Brazil:
    - Lei Geral de Proteção de Dados Pessoais (LGPD) (2018)
    - Bill 2338/2023 (proposed)
- Canada: Artificial Intelligence and Data Act (AIDA) (proposed)
- China: Artificial Intelligence Law of the People's Republic of China (proposed)
- European Union
    - Artificial Intelligence Act (2024)
    - General Data Protection Regulation (2016)
    - Digital Services Act (2022)
- Germany: Act on Autonomous Driving (2021)
- Greece:
    - Greek Law 4961/2022 (2022)
    - A Blueprint for Greece' s AI Transformation (2024)
- India: Digital Personal Data Protection Act (2023)
- Japan: Act on the Protection of Personal Information (2022)
- Peru: Draft Regulation of Law No. 31814
- Republic of Korea: Act on the Development of Artificial Intelligence and Establishment of Trust (2024)
- South Africa: Protection of Personal Information Act (POPIA) (2013/2020)
- Thailand: Draft Royal Decree on Business Operations that Use Artificial Intelligence Systems (2024)
- United Arab Emirates: Federal Decree-Law No. 45 of 2021 on Personal Data Protection (2021)
- United States:
    - Algorithmic Accountability Act (Proposed)
    - California: California Consumer Privacy Act (CCPA) (2018)
    - Colorado: Colorado Artificial Intelligence Act (2024)
    - New York Local Law (188)
- Vatican City State: States's Guidelines on AI,

Regional Frameworks:

- African Union Convention on Cyber Security and Personal Data Protection (Malabo Convention) (2014)
- Council of Europe Framework Convention on Artificial Intelligence, Human Rights, Democracy and the Rule of Law (2024)
- Council of Europe Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (Convention 108).(1981)

International Frameworks and Documents

- UN General Assembly Resolution 79/L.77 on lethal autonomous weapons systems (December 2, 2024)
- UN General Assembly Resolution "Seizing the opportunities of safe, secure and trustworthy artificial intelligence systems for sustainable development" (A/78/L.49) (March 11, 2024)
- UN Human Rights Council Resolution A/HRC/RES/53/29 on New and Emerging Technologies (July 14, 2023)
- UN Human Rights Council Resolution 48/13 on the Right to Healthy Environment (April 12, 2022)
- UN Human Rights Council Resolution A/HRC/RES/47/16 – The Promotion, Protection, and Enjoyment of Human Rights on the Internet (July 13, 2021)
- UN Human Rights Council Resolution 42/15 on the Right to Privacy in the Digital age (2019)
- Inter-Parliamentary Union (IPU) Assembly: Geneva Declaration on Harnessing Science, Technology, and Innovation (STI) for a More Peaceful and Sustainable Future (October, 17 2024)
- Global Digital Compact (2024)

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