



# Redefining Human Rights in the Age of AI: Challenges, Opportunities, and the Path Forward

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## ARTICLE INFO ABSTRACT

The swift evolution of artificial intelligence (AI) is reshaping discussions about human rights, prompting a need to reassess core principles in the digital age. AI-enabled technologies affect numerous aspects of daily life, including privacy, freedom of speech, equality, and non-discrimination. Although AI presents opportunities to enhance human rights—like increasing access to justice, bolstering democratic involvement, and facilitating data-informed policymaking—it also brings serious challenges. These challenges encompass algorithmic bias, widespread surveillance, job loss, and the potential to impede autonomy. This paper investigates the relationship between AI and human rights, emphasizing critical concerns related to the ethical governance of AI, its accountability, and transparency. Further, it analyzes the risks of AI mounting up or widening existing biases and the present legal frameworks addressing the same. Furthermore, the study examines the roles of international organizations, their agencies, and various other stakeholders in ensuring a human-centric AI development that upholds and respects human rights, their dignity and provides justice. As AI has the potential to transform the societal framework, a balanced approach or strategy is essential for its development in order to ensure that its benefits are available to the world at large without hampering innovation. The paper suggests a collaborative approach involving multiple stakeholders, promoting responsible AI legislation, human-centered AI design, and strong enforcement mechanisms to protect rights in the digital realm. Ultimately, reimagining human rights in the age of AI requires a proactive outlook that incorporates ethical AI principles, international cooperation, and legal protections to ensure that technological advancements benefit humanity instead of undermining it. This research contributes to the ongoing worldwide dialogue on AI governance and human rights, providing insights into the challenges, opportunities, and policy directions for a fair digital future.

**Key Words:** Artificial Intelligence, Human Rights, Data Misuse, Right to Privacy.

## Introduction

Human rights have always been fundamental to human civilization, but the evolution of Artificial Intelligence has changed its dynamics. The rapid advancement in Artificial Intelligence has transformed various sectors, including healthcare, education, employment, and governance. The growth in AI brings into existence a dual-edged sword of benefits and challenges. On the one hand, it has the potential to improve efficiency, innovation and decision-making across sectors, while on the other hand, it poses challenges to various human rights. Integrating Artificial Intelligence in routine tasks can influence individual freedoms, including freedom of speech and expression, privacy, right to life, right against exploitation, right against discrimination and other human rights. The intersection of AI and human rights highlights the importance of balancing technological progress with the protection of human rights.<sup>1</sup>

Artificial intelligence has transformed our way of life, communication, education, and working in any organization or industry. However, there are possible threats associated with the employment of AI. It can intensify the current social biases, generate disparities within society, significantly impact privacy rights, and present difficulties regarding various existing human rights matters.<sup>2</sup> The pre-existing biases towards any community affect their right to be treated equally and be subjected equally before the law. Further, using its algorithm, AI can influence people and affect their freedom of speech and expression.<sup>3</sup> It can force them to act in a specific way or even has the potential to make them an “algorithmic customer”.<sup>4</sup> It can steal or copy any

person's voice, video, expression and other relevant data and has the potential to "Deepfake" them, which in turn creates an identity threat.<sup>5</sup> Further, AI-powered applications can infringe on individual privacy by continuous surveillance of them. Furthermore, the gradual increase in the integration of AI-powered software and robots in industries and other sectors poses a threat to individuals' right-to-work as it can potentially replace humans.<sup>6</sup> (Furthermore, integration of AI increases the efficiency of the work, automates the outcome and makes the processing speedy. Therefore, the rapid growth in integrating AI-powered software and robots in industries and other sectors can potentially replace humans and threaten their right to work.)<sup>7</sup> In addition, AI lacks emotional intelligence, and it can apply every permutation and combination to complete its task, whether ethical or not. Therefore, if not programmed ethically, the use of AI-powered drones and military equipment may result in severe threats to human civilization or humanity to complete its task; it may even kill any person acting as an obstacle in its way<sup>8</sup>.

International and local organizations recognize the opportunities and risks of using Artificial Intelligence. In 2015, the United Nations Interregional Crime and Justice Research Institute (UNICRI) launched its programme on AI and Robotics.<sup>9</sup> The Director of UNICRI, Ms. Cinda J. Smith, during the 71<sup>st</sup> UN General Assembly Session in September 2016, announced the ongoing process of the opening and establishment of the first Centre on Artificial Intelligence and Robotics within the United Nations with the support of the Government of the Netherlands and the City of The Hague in the city of The Hague, Netherlands.<sup>10</sup> The centre<sup>11</sup> aims to enhance understanding of the risk-benefit duality of Artificial Intelligence and Robotics.<sup>12</sup> Further, in 2018, an International Conference brought together 32 UN agencies, AI innovators and public and private sector decision-makers to make strategies on AI and support progress towards UN Sustainable Development Programmes (SDGs).<sup>13</sup> In July 2023, Volker Turk, UN High Commissioner for Human Rights, at the High-Level side event of the 53rd session of the Human Rights Council, pointed towards the importance of grounding Artificial Intelligence into Human Rights and limiting it through regulations.<sup>14</sup> In addition to it, the UN Secretary-General in September 2018, under the UN 2.0 Policy Belief, outlined its vision to promote a proactive approach for the UN system organisations to integrate AI to promote human rights and to address gender inequality, discrimination and bias present in the AI models.<sup>15</sup> Furthermore, in November 2021, UNESCO came up with its first-ever global standard on AI ethics in the form of the "Recommendations on the Ethics of Artificial Intelligence". The recommendations are advisory in nature and are applicable to 194 (all the) member states and seek to protect individuals' human rights and dignity through the fair and transparent use and deployment of Artificial Intelligence. Further, a draft of the Framework Convention on Artificial Intelligence, Human Rights, Democracy and Rule of Law was published by the EU in July 2023.<sup>16</sup> This legally binding agreement seeks to guarantee that artificial intelligence adheres to shared standards relating to human rights, democracy, and the rule of law while reducing the potential risks to these rights stemming from the utilization of AI.<sup>17</sup> The influence of AI extends widely, potentially impacting every industry. To tackle this issue, in 2018 report on "National Strategies for Artificial Intelligence" by the Government of India highlighted the importance of responsible development of AI.<sup>18</sup> It states that AI should be developed in such a way as to address and implement data protection laws to ensure respect for individual human rights without hampering AI developments.<sup>19</sup> The first part of this report outlines the Principles for Responsible AI.<sup>20</sup> Further, in 2021, the Government of India, in partnership with the World Economic Forum Centre for the Fourth Industrial Revolution, released a report on "Responsible AI".<sup>21</sup> Time and again, the UN, its organs, the European Union and other national and International Organizations have highlighted the importance of deploying ethics in AI which can respect an individual's human rights, dignity, and autonomy.<sup>22</sup> This includes making an AI system free from any form of discrimination or bias and protecting individual privacy to fill the existing gaps of inequality.<sup>23</sup> The present research, employing a doctrinal methodology, aims to underscore how AI could influence Human Rights and examines the measures adopted by International Organizations, such as the UN and EU, to alleviate the negative impacts of AI on human rights. Additionally, the research paper explores advancements at the national level, specifically in India, regarding Artificial Intelligence's ethical or human rights-focused implementation.

### **Concept of Human Rights**

Human rights can be found in all societies and at all times. The concept originated in political and philosophical thinking in the past and has continuously grown since then. The contemporary evolution of human rights is rooted in documents proclaiming individual rights. Key documents in this development are the Magna Carta (1215), the English Bill of Rights (1689), the French Declaration of the Rights of Man and Citizen (1789), and the US Constitution along with the Bill of Rights (1791).<sup>24</sup> The concept grew in the 20th century and continued in the 21<sup>st</sup> century. At an international level, countries came together in 1919 and formed the International Labour Organisation, which aims to protect workers with respect to their health, safety and other rights.<sup>25</sup> The contemporary understanding of human rights emerged following the establishment of the United Nations. In February 1946, the United Nations established a Commission on Human Rights, which produced a draft known as the Universal Declaration of Human Rights (UDHR), adopted by member states on December 10, 1948.<sup>26</sup> The UDHR extends the stature of Human Rights from merely being a domestic right to an International Right. It is referred to as the international Magna Carta, which claims that all human rights are individual and independent.

As per the United Nations, “*Human Rights are inherent in all human beings, regardless of race, sex, nationality, ethnicity, language, religion, or any other status and consists of diverse forms of rights including the right to life and liberty, freedom from slavery and torture, freedom of opinion and expression, the right to work, etc.*”<sup>27</sup>. Additionally, according to the Universal Declaration of Human Rights, neglecting human rights is a savage act, and acknowledging individuals' intrinsic dignity and unalienable rights is essential for freedom, justice, and global peace.<sup>28</sup>

Human rights, through a naturalistic perspective, can be seen as the rights always possessed by all human beings and placed by their humanity. Further, it is not only a moral and ethical right but also a legal right. This means that there exists a duty to these rights. Duty to be respected by others and to respect others' rights.<sup>29</sup> These are inalienable rights that every human possesses regardless of gender, race, religion, caste, nationality, status, or any of them. Human rights encompass a complex array of concepts that can be viewed through different lenses.<sup>30</sup> They include civil and political rights, which cover the rights to life, freedom, privacy, expression, and participation, alongside economic, social, and cultural rights like the rights to work or gainful employment, access to health or a clean environment, education, and cultural engagement, among others. It is a continuously evolving right, and it is difficult to confine it in some strictly packed bracket definition. But these perspectives show that Human Rights are universally recognised and accepted rights that are essential for a human to live his life freely with full potential.<sup>31</sup>

### **Artificial Intelligence and Human Rights: Navigating the Crossroads**

Technological innovation marks the beginning of the fourth industrial revolution. However, the advent of Artificial Intelligence has completely revolutionized and provided a new pace to it. AI system employs Machine Learning, Deep Learning, Neural Networks, etc. and work using algorithms and data.<sup>32</sup> These AI systems or algorithms are trained on large or massive data sets. They are modelled after human brains, which can learn from available data, analyse, predict accurately, and answer rationally.<sup>33</sup> AI technology is enhancing at a rapid pace with the coming up of powerful computer models, improved algorithms and the presence of large data sets, and it is expected to achieve the level of Artificial superintelligence in the near future.<sup>34</sup>

Artificial Intelligence has the potential to mimic the human brain, think and work like a human and provide powerful tools for human rights investigation, documentation and policies. It can significantly improve catastrophe risk mitigation and resource allocation, increase efficiency and productivity, and make human work easy and efficient in numerous ways.<sup>35</sup> Although AI technology provides new potential and is inbuilt with numerous benefits but at the same time, there exist some ethical questions concerning the intrusion of individual human rights.<sup>36</sup> Artificial intelligence can infringe on personal privacy by constantly monitoring individuals' data. Additionally, it may impact the rights to free speech and expression, the right to choose one's profession and earn a living, the right to protection against defamation, and even create deepfakes of individuals without their permission.<sup>37</sup> A few of the major human rights concerns due to the employment of AI are mentioned below:

**Privacy Concern and Data Breach:** Artificial Intelligence works on large data sets. These data are collected through various mobile applications or internet software, which are again used and exploited by various industries or consumer-driven market players to have surveillance over their target consumers.<sup>38</sup> Using this surveillance mechanism, the market players, using their respective AI models, push their products and make the users algorithmic consumers.<sup>39</sup> Further, AI-powered surveillance systems, such as facial recognition and location tracking tools, can track the movement of an individual and predict their possible next move or step.<sup>40</sup> AI tools can also track the individual's online movement and search history, which raises concerns about mass surveillance and infringement of the individual's privacy rights. Furthermore, using their algorithmic capacity and applications, they may also access an individual's medical and financial information and exploit it by finding or targeting their vulnerable areas.<sup>41</sup>

The collaboration between DeepMind, Google's AI subsidiary, and the Royal Free NHS Trust is a notable instance related to AI and data privacy.<sup>42</sup> In this scenario, DeepMind utilized AI to analyze data from more than 1.6 million patients to aid in the early detection of kidney disease. Nevertheless, the Information Commissioner's Office (ICO) determined that the NHS Trust had improperly shared patient information with DeepMind without obtaining patient consent, thereby infringing upon their privacy rights.<sup>43</sup> This case highlights how an AI-driven health application can bypass patient's consent and breach their privacy. This also shows how even a well-intentioned AI programme can result in a violation of privacy rights if the data is mishandled.<sup>44</sup> In another case, Clearview<sup>45</sup> is a facial recognition company that has been accused of collecting billions of images from social media sites without users' permission.<sup>46</sup> Law enforcement agencies employ this artificial intelligence system to recognize individuals.<sup>47</sup> This situation has sparked serious concerns regarding privacy, data protection, and consent in relation to GDPR. This case is a significant illustration of the difficulties encountered in regulating AI companies that function internationally and manage large amounts of personal data without user approval.<sup>48</sup>

**Deepfake:** AI can Deep-Fake everything, including a human being. As per Merriam-Webster, “*deepfake is an image or recording that has been convincingly altered and manipulated to misrepresent someone as doing or saying something that was not actually done or said by him.*”<sup>49</sup> It is a manipulated video wherein someone's

face or body has been digitally modified to make them resemble another individual, often used with harmful intent to disseminate misleading information. Individual data, including their image, video, and voice, collected through various means, are fed into AI-driven systems or software, and the software is capable of deep faking them by digitally altering their images, videos, and voices.<sup>50</sup> AI can even mimic the voice of any person and talk in the way that person speaks or talks. Using a prompt, seemingly real images or identical voices of prominent politicians, celebrities or even a closely related person can be created. These identical figures can impersonate a real person and can be used by criminals to commit fraud, blackmail, extortion, etc. Recently, many criminal cases related to fraud or identity theft have been reported by impersonating a person using the AI deepfake technique.<sup>51</sup> In many cases, deepfake is also used to defame a person, which severely affects a person's human rights. It is also used for making celebrity deepfake pornographic content and is mainly employed for making revenge porn, non-consensual porn, or harassing any person.<sup>52</sup>

In March 2022, a deepfake video featuring Ukraine's President Volodymyr Zelensky appeared on social media, showing him urging Ukrainians to surrender their weapons. This marked the first significant deepfake video in the context of an armed conflict and is a notable illustration of information warfare.<sup>53</sup>

In recent times, deepfake has been used excessively for financial fraud. In addition to images and videos, deepfake can clone and impersonate individuals' voices. This also led to identity theft. AI Voice Scams are very common nowadays, where the scammer uses this technology to take money from an individual's close relatives fraudulently.<sup>54</sup> The deepfake technique is used widely by cybercriminals for cyber frauds, extortion, blackmailing, and even cyberbullying, which eventually affects vulnerable sections of society and makes them more vulnerable.<sup>55</sup>

**Discrimination and Bias:** AI systems are trained on pre-existing data. These pre-existing data may have many existing biases, such as gender bias, religion or caste bias, racial bias, etc.<sup>56</sup> If not trained cautiously, these AI systems may even exacerbate existing biases in society, and the processing of any data may lead to a biased outcome, severely affecting the marginalized group of society. Many examples can be seen in AI-based hiring processes, criminal law investigation processes, etc.<sup>57</sup> In 2015, certain biasness against women candidates was observed in the Amazon hiring algorithm. The biasness was the result of the training on pre-existing data where men candidates were selected for the interviews and jobs.<sup>58</sup> Further, one of the major algorithmic biases is seen in doing Policing by Machine or AI algorithm.<sup>59</sup> A prominent example of bias in predictive policing is seen in the US Criminal investigations, where it was observed that the US criminal law investigations had shown biased results by pointing out black people as being criminals in many cases where the data was processed by using AI systems.<sup>60</sup>

**Right to fair work:** Artificial intelligence-based technology is rapidly employed in almost every industry. Although this may have made a system work effectively simultaneously, it may impact the working culture, and there is a great threat to the employment of human workers.<sup>61</sup> AI has the potential to replace human workers, resulting in making them unemployed, reducing job opportunities and creating economic inequality.

**Right to freedom of expression:** AI has the potential to influence individual decisions by subjecting them to some targeted advertisement, personalized content or deepfake. This can severely affect individual autonomy, resulting in the loss of their free will.<sup>62</sup> The employment of AI raises many significant human rights-related ethical concerns, a few of which are listed above. These can severely impact individual human rights, and the same is required to be addressed effectively.

### International Responses to AI and Human Rights

Global acceptance of Human rights in its true sense emerged only after the formation of the United Nations. Since then, the concept of human rights has changed many folds. With the innovation in technology and development in the field of artificial intelligence, the bandwidth of human rights has increased drastically.<sup>63</sup> In its initial phases, the regulations concerning human rights are inscribed in several international norms, including the Universal Declaration of Human Rights (UDHR), the International Covenant on Civil and Political Rights (ICCPR), and the International Covenant on Economic, Social and Cultural Rights (ICESCR). Further, through its various drafts and legislations, the European Union has also done remarkable work in recognizing and developing the modern concept of human rights in this AI-driven era. International organizations like IEEE have also tried to contribute to protecting human rights.<sup>64</sup>

#### Role of the United Nations in Regulating AI and Protecting Human Rights:

Since its formation, the United Nations has done commendable work for the protection, promotion and recognition of various human rights. The first UN milestone document on human rights, titled the Universal Declaration on Human Rights (UDHR), was proclaimed by the United Nations General Assembly (UNGA) in Paris on 10<sup>th</sup> December 1948.<sup>65</sup> It was accepted as a common standard of achievement for all peoples and all nations, which, for the first time, sets out the principles for universally protecting fundamental human rights. This document has inspired and paved the way for future human rights treaties and recognised it as a subject of international importance.<sup>66</sup>

Article 1 of the UDHR mentions that “every human being is born free and is entitled to equal rights”. The regulations state that a person's fundamental right to life, liberty, and security is vested in every individual since birth, which can be protected and safeguarded irrespective of religion, race, caste, sex, place of birth, etc.<sup>67</sup> Further, it opposes any arbitrary arrest,<sup>68</sup> detention or exile.<sup>69</sup> Similarly, articles 9 and 14 of the ICCPR also protect a human's right to life, liberty, and security, subjecting them to equality before the court by ensuring a fair trial.<sup>70</sup> As per Article 14 of the ICCPR, there shall be a presumption of innocence if a person is charged with a criminal offense and undergoing a criminal trial.<sup>71</sup>

The regulations, i.e., UDHR and ICCPR, prohibit arbitrary interference in individual privacy and state that there shall be protection against the arbitrary attack on the individual reputation.<sup>72</sup> Further, the right to freedom of movement and lawfully reside at any place is also considered one of the fundamental rights of a human being by UDHR and ICCPR.<sup>73</sup> The right to freedom of thought, conscience, belief, expression, religion, assembly, and association is also considered a fundamental human right protected by both UN regulations.<sup>74</sup> The equality of treatment without any prejudice or discrimination is one of the core principles of both these regulations.<sup>75</sup> Further, the regulations state that every human being has the right to participate in political activities, and their right to self-determination shall be taken care of and should be protected.<sup>76</sup> Furthermore, Article 20 of the ICCPR states that there shall not be any propaganda war against any human being based on any discriminating factors or on any national, religious, or racial hatred.

One of the significant threats to integrating AI in operations is the reduction of human jobs. This area is also covered and protected under Article 6 of the ICESCR. The current article states that “all the state parties to this covenant recognize the right to work, which also includes the right of everyone to the opportunity to gain his living by work”. Further, the state parties also have to recognize everyone's right to an adequate standard of living.<sup>77</sup>

The United Nations and its organizations have made several efforts to safeguard human rights by regulating artificial intelligence to ensure the protection of all these fundamental human rights in the AI-driven era. A few of the initiatives include:

**(a) UN Secretary-General's AI initiative:** The UN Secretary-General has always been vocal about the need for a coordinated approach to tackle AI. In 2017, the United Nations' leading agency for digital technologies, the International Telecommunication Union (ITU), established “AI for Good,” which aims at “identifying trustworthy AI applications, building skills, and standards, and advancing AI governance for sustainable development.”<sup>78</sup> To advance a trustworthy AI for sustainable development, a global summit named “AI for Good Global Summit” is organized annually to bring together AI experts, government representatives, business leaders, and civil society organizations to deliberate on the ethical implications of AI and propose solutions for ensuring humanity-centric AI.<sup>79</sup> The UN promotes the idea of the development of AI, which has human dignity and the protection of human rights at its core. It focuses on ensuring that the benefits of AI are broadly shared while mitigating the risks.<sup>80</sup>

**(b) Human Rights Council and the Role of Experts:** Following the adoption of a resolution by the Human Rights Council during its forty-first session, the Advisory Committee submitted a report on “New and Emerging Digital Technologies and Human Rights.”<sup>81</sup> This report examines various concerns associated with AI decision-making and emphasizes the potential for discriminatory results if biased algorithms drive decisions.<sup>82</sup> Additionally, the report underscores the necessity of conducting thorough human rights due diligence for automated decision-making tools.<sup>83</sup>

**(c) UNESCO and Ethical Guidelines on AI:** The United Nations Educational, Scientific and Cultural Organization (UNESCO) adopted its Recommendations on the Ethics of Artificial Intelligence in November 2021.<sup>84</sup> The recommendations are a significant step towards setting up ethical standards for developing and deploying ethics in AI at the global level. It provides a framework aimed at fostering responsible AI development. Protecting human rights and dignity while ensuring fairness, transparency, and accountability in AI is the cornerstone of these recommendations.<sup>85</sup>

**(d) Global Cooperation on AI Governance:** The United Nations has been working tirelessly to foster international collaboration on AI governance. The roadmap for Digital Cooperation put forth by the UN Secretary-General, informed by the findings of the high-level panel for Digital Cooperation that met from 2018 to 2019, outlines eight critical action areas, emphasizing the need for a unified international strategy.<sup>86</sup> This involves promoting digital inclusivity, safeguarding human rights in the digital age, fostering international collaboration on AI, enhancing a secure and trustworthy digital landscape, and developing a more efficient framework for global cooperation.<sup>87</sup> The UN advocates for dialogue on AI governance among governments, the private sector, civil society, and various stakeholders to guarantee that the advantages of AI are shared fairly among countries.

### **Role of the European Union in Regulating AI and Protecting Human Rights:**

The European Union has played a significant role in regulating Artificial Intelligence while ensuring the protection of Human Rights and ethical standards related to the employment of AI.<sup>88</sup> The EU has proactively created a comprehensive regulatory framework for regulating AI-related activities and its advancement in various sectors.<sup>89</sup> Few of the EU's efforts to regulate AI and protect human rights are mentioned below:

**(a) A governance framework for algorithmic accountability and transparency:** To understand the governance framework for ensuring algorithmic transparency and accountability, the Scientific Foresight Unit within the Directorate-General for Parliamentary Research Service (EPRS) of the Secretariat of the European Parliament in 2019 pursued research that acknowledged the swift progress in incorporating algorithmic systems into decision-making processes within the public and private sectors while considering its potential impacts on individuals, organizations, and society.<sup>90</sup> Moreover, it has emphasized the potential biases and human rights issues linked to algorithmic systems taking over certain tasks. It has been noted that these algorithmic systems do not possess the ability of human decision-makers to comprehend the context of human actions and to assess when a decision might violate human rights.<sup>91</sup> This study primarily focuses on developing policy options for the governance of accountability and transparency of an algorithmic system.<sup>92</sup> The study has considered and analysed algorithmic systems' social, technical and regulatory challenges and developed policy options accordingly. The study has proposed four options to promote transparency and accountability, each addressing different aspects of algorithmic transparency and accountability. These include: "Awareness raising: education, watchdogs and whistle-blowers, Accountability in public-sector use of algorithmic decision-making, Regulatory oversight and legal liability, and Global coordination for algorithmic governance."<sup>93</sup> This study has considered these algorithmic issues as matters of human rights concern. It has also discussed the 2018 Toronto Declaration on protecting the right to equality and non-discrimination in machine learning systems.<sup>94</sup> The study also pointed towards the need for a global collaboration or dialogue in developing a globally accepted regulation governing algorithmic system so that the tensions arising from the "winner-take-all" narrative around the development of ethics in AI can be addressed effectively.<sup>95</sup>

**(b) Recommendations on a framework regarding the ethical dimensions of artificial intelligence, robotics, and associated technologies (Draft Report to the European Commission):** On March 21, 2020, the European Parliament released draft recommendations.<sup>96</sup> Among various significant principles, some of the core aims of the draft report are to foster trust in artificial intelligence, robotics, and related technologies by guaranteeing that these technologies are developed, utilized, and implemented in an ethical way, as well as to facilitate their adoption by establishing an appropriate regulatory framework.<sup>97</sup> The initial segment of this draft proposal includes the "Regulation on ethical principles for the development, deployment, and use of artificial intelligence, robotics, and related technologies."<sup>98</sup> These regulations are founded on the principle of creating and implementing human-centred AI, robotics, and related technologies. Additionally, the regulations emphasize the necessity of assessing risks associated with AI technologies and ensuring that these technologies are transparent and accountable<sup>99</sup>. Moreover, the development of technology should aim to eliminate any form of bias and discrimination, uphold privacy, and provide protections against privacy violations

**(c) Recommendations for enhancing the existing legal frameworks for genomics, human enhancement, and AI and robotics:** In 2020, the European Commission presented its recommendations for enhancing the existing legal frameworks for genomics, human enhancement, and AI as well as robotics.<sup>100</sup> The report highlights that to safeguard and to respect human rights and uphold societal values, it is important and essential to incorporate ethical consideration and human rights standards in the development and application of emerging technologies.<sup>101</sup> The current report identifies the potential changes required to be done in the existing legal and human rights frameworks, be it national, EU or international level, that may be necessary or beneficial for creating an environment centered on human rights, enabling the effective implementation of ethics in AI. Additionally, it provides recommendations for strengthening enforcement and encouraging the utilization of current legislation.<sup>102</sup>

**(d) Report on Civil Liability framework for Artificial Intelligence:** This 2020 report provides extensive recommendations for establishing a regulation by the European Parliament and Council concerning civil liability related to the functioning of AI systems<sup>103</sup>. The report discusses the concept that citizens should receive an equivalent level of protection as guaranteed by their civil rights. This consideration applies regardless of whether the damage is inflicted by an AI system or not, or if the harm occurs in a physical or virtual manner.<sup>104</sup> The intent of the legislators is to bolster and reinforce citizens' trust in emerging technologies while addressing all potential harms that may affect them without obstructing the progress of AI development.<sup>105</sup>

**(e) EU Artificial Intelligence(AI) Act (Draft):** The EU, to regulate Artificial Intelligence (AI) to ensure favorable conditions for the development and use of AI technologies, came up with the first draft of the regulatory framework for AI in April 2021.<sup>106</sup> The current draft uses a risk-based approach to analyze and classify AI systems to regulate them to make sure that the AI systems used in the EU are safe, transparent, traceable, non-discriminatory, and environmentally friendly.<sup>107</sup> Further, the draft Act proposes to ban AI systems with unacceptable risk, such as AI systems used for social scoring or biometric surveillance systems that could infringe on individual privacy rights. Furthermore, high-risk AI systems, particularly in decision-making, must ensure that they are transparent, accountable, and comply with fundamental rights.<sup>108</sup>

**(f) Fundamental Principles and Ethical Guidelines:** The European Union focuses on developing human-centric AI and ensures that AI developments respect human rights and follow ethical principles. This includes developing an AI system that respects human dignity, privacy, equality of law, non-discrimination, and bias-free. The adoption of the General Data Protection Regulation (GDPR) in 2016 by the European Union

marks their landmark step towards the adoption of a law that secures the privacy of citizens in this technology- driven digital era.<sup>109</sup> AI systems are trained on big data, and hence, it also applies to AI systems. The regulations ensure that AI-driven system respects individual privacy and data protection rights while processing their data and consider their right to explanation.<sup>110</sup> Further, the EU's Charter of Fundamental Rights and the Equality and Non-Discrimination Principle ensure that the AI systems are free from any bias and prevent discrimination based on religion, race, caste, sex, age, or any other form.<sup>111</sup> Furthermore, the EU promotes ethics in AI.<sup>112</sup> The April 2019 Ethics Guidelines for Trustworthy AI, issued by the European Commission's High-Level Group on AI, outline accountability, transparency, and fairness as the key principles to guide human-centric AI development that aligns and respects human rights. It states that trustworthy AI should be lawful, ethical and robust.<sup>113</sup>

**(g) Digital Services Act (DSA) and Digital Markets Act (DMA):** Both these acts<sup>114</sup> can also be considered as a part of the EU's broader effort to regulate digital services, including the use of AI-based applications in social media, online platforms, and other digital services.<sup>115</sup> These acts focus on making a transparent and accountable AI system or AI-based digital platform to protect users from harmful content and ensure that their fundamental human rights are not infringed due to the influence or recommendations of these AI-based systems or applications.<sup>116</sup>

**(h) Strengthening Data Governance:** AI systems are trained on big data, and data plays an integral role in the development and functioning of an AI system. Considering the same, the EU has taken steps to create a strong data governance framework that aligns with human rights and adopted the General Data Protection Regulation (GDPR) in 2016. <sup>117</sup> It is the most comprehensive data protection law in the EU, which ensures that AI systems must respect individual's privacy rights and ensure that their personal data is handled securely and ethically.<sup>118</sup>

Considering all the above-mentioned points, it can be said that the EU has always been at the forefront and acted as a guiding light in regulating AI with a strong emphasis on human rights and ethical considerations.

### Intersection of AI and Human Rights Law in India

India has always been cautious about protecting and safeguarding individual human rights. The Constitution of India under Part III lists all the fundamental rights and ensures protection for them.<sup>119</sup> However, technological advancement and the integration of AI-based systems have raised new concerns about these human rights. To address the same, India has taken several important steps.<sup>120</sup> Though initial and much of the regulatory framework are still in development, they form an important base for India's development of the AI regulatory framework.<sup>121</sup> Below are the key developments and steps taken by India to address human rights-related issues emerging due to the integration of AI:

**(a) National Strategy on AI:** In 2018, NITI Ayog released a "National Strategy for Artificial Intelligence" policy document outlining India's approach to leveraging AI for economic growth and social inclusion.<sup>122</sup> The document highlighted the importance of AI development in India and acknowledged the need for ethical consideration in AI while ensuring the protection of human rights.<sup>123</sup> This paper aims to lay the groundwork for evolving a national strategy for AI while leveraging approaches that democratize access to and further development of AI.

**(b) Responsible AI:** The development of guidelines for "responsible AI" is among one of the four broad recommendations of NSAI for supporting and nurturing an AI ecosystem in India.<sup>124</sup> In February 2019, NITI Aayog developed a document on "Responsible AI", part 1 highlighting the "Principles for Responsible AI" development. Based on systems and societal considerations, the present document identifies seven broad principles for responsible management of AI.<sup>125</sup> It includes safety and reliability, equity, inclusivity and non-discrimination principles, privacy and security, transparency, accountability, protection and reinforcement of positive human values.

**(c) The Digital Personal Data Protection Act, 2023:** The DPDP Act, as enacted on 11th August 2023, applies to the processing of digital personal data within India, where such data is collected either online or in offline mode and is digitized.<sup>126</sup> The act also applies to processing data outside India if such data is used to offer goods and services in India as the AI system needs data for its training and processing of information.<sup>127</sup> Therefore, the present act refrained from processing individual personal data without their consent. Privacy and data protection are central human rights concerns, and regulating digital data processing also limits the interaction of AI systems with an individual's privacy rights without their consent.<sup>128</sup>

**(d) National AI Portal of India:** This portal was launched on May 30, 2020, and was jointly started by the Ministry of Electronics and Information Technology (MeitY), the National e-Governance Division (NeGD) and the National Association of Software and Service Companies (NASSCOM) with support from the DoSE&L and the Ministry of Human Resource and Development.<sup>129</sup> The portal is a constant source of knowledge on AI and related topics and publishes AI related articles, reports, news, government initiatives and other AI related information to update public regarding the AI developments in India and aware them about it.<sup>130</sup>

**(e) Supreme Court Rulings:** The Indian Supreme Court has proactively addressed human rights-related issues. In the landmark case of *Justice K.S. Puttaswamy (Retd.) v. U.O.I, 2017*<sup>131</sup>, Supreme Court of India recognized the right to privacy as a fundamental right under the Indian Constitution, establishing a legal framework for privacy protection in the country.<sup>132</sup> Though not directly, this case has addressed the human rights issues indirectly related to AI by pointing out the need for robust safeguards against AI systems that can potentially infringe on individual privacy and human rights.<sup>133</sup>

Though India has taken significant strides in recognising the importance of ethics in AI, privacy and data protection, but still much more is required to be done to ensure the safe and human rights centric deployment of AI systems in India.

### Challenges in AI Regulations

AI-integrated systems have immense potential. They have the capability to simplify any task, and drive innovation and economic growth. However, their use also raises human rights concerns related to ethics, transparency, accountability, and social impacts. The same has been recognized internationally, through various reports and documents, by organizations like the UN and EU, and by national bodies. International bodies like the UN and EU have tried to regulate AI but the regulation of Artificial Intelligence (AI) presents significant challenges worldwide.<sup>134</sup> A few of the challenges associated with the regulation of AI are listed below:

**(a) Balancing Innovation with Human Rights Protection:** AI technology is evolving rapidly. Quick advancements in AI-linked systems are occurring daily. With every upgrade, something new is added to the technology, creating new ethical concerns, which puts challenges before the regulatory agencies. Traditional regulatory systems face trouble and struggle to keep up with the pace of technological transformation. As a result, regulations can quickly become outdated and create gaps in the legal regulatory frameworks.<sup>135</sup> Further, technological development is essential and hence AI regulations must be made in such a way that while ensuring safeguard to the human rights, it refrain from hampering the AI development. Further, AI technology is complex and is still in its developmental phase.<sup>136</sup> As a result, a lot remains to be explored in future. Therefore, on being fully developed, there are chances that unintended ethical concerns may pop out in future which is difficult to predict and regulate today.

**(b) Ethical Dilemmas and Policy Gaps in AI Development:** The development and deployment of AI systems raise several ethical dilemmas and reveal some crucial policy gaps that can have far-reaching impacts on society. Some of the ethical dilemmas associated with AI are listed below:

**(i) Bias and Discrimination:** AI is trained on pre-existing data. These data sets may have some biases and discriminations, and these systems often reflect these.<sup>137</sup> Further, AI systems have the potential to amplify existing biases. This may ultimately lead to discriminatory outcomes and affect individual human rights. Therefore, ensuring that the AI system is trained on unbiased data or data free from any kind of discrimination is a huge challenge, and the same is essential to promote equity and fairness in AI decision-making.<sup>138</sup>

**(ii) Privacy Concerns:** AI system works on data and sometimes uses personal data of human beings to train its algorithms. Therefore, it is important to strike a balance between the improvement of AI services and protection of individual personal data.<sup>139</sup>

**(iii) Transparency and Explainability:** AI systems mostly employ complex deep-learning algorithms and work as a “black box.” It means it is difficult to understand how a particular decision has been made or arrived at.<sup>140</sup> This lack of transparency raises concerns about the fairness and accountability of an AI system, particularly when they are employed in the recruitment process, criminal justice delivery system, healthcare sector, finance, etc.<sup>141</sup> Therefore, making a transparent and accountable AI system which provide explanation for all its decision is the need of the time and is again a challenging task.

**(iv) Recognize human rights:** AI systems do not have human emotions. It cannot analyse circumstances under which a human might have done something. They lack emotional intelligence, and only humans are well equipped to handle it.<sup>142</sup>

The above-mentioned ethical dilemmas raise some policy gaps in AI development. A few of the gaps are mentioned below:

**(i) Absence of comprehensive Global Regulation:** there is a lack of a uniform global regulatory framework concerning the governance of AI. Different countries have different laws and regulations governing AI-related concerns, which ultimately lead to inconsistency in dealing with the human rights-related issue of AI systems.<sup>143</sup> Further, no international collaboration has been done so far to address the violation of human rights due to the integration of AI systems.

**(ii) Inadequate oversight of AI developers:** There is little guideline to have oversight of AI developers. Most of these guidelines lack enforceability and sanctions, which ultimately result in the development of an AI system that barely integrates the importance of human rights and shows respect to it.<sup>144</sup>

**(c) Multi-Stakeholder Collaboration in AI Regulation:** There is a lack of collaboration in developing AI regulations. AI technology affects multiple sectors and each sector has unique needs and challenges. Therefore, to make an AI regulatory framework, it is pertinent to invite the participation of multiple stakeholders, including governments, private sectors, companies, academicians, international

organizations, etc.<sup>145</sup> In order to address the ethical concerns associated with the employment of AI in various field, it is important to ensure inclusivity and promote equality in making these regulations. The challenges mentioned above are not exhaustive and there can be more such challenge to AI regulations. In order to have an effective and efficient human rights centric AI regulation, it is pertinent to address all the challenges.

### Conclusion

AI systems provide many opportunities to human beings and can simplify any difficult task. But, at the same time, it has the potential to influence humans and infringe on their fundamental human rights. AI systems pose new challenges to human rights. AI applications can potentially breach an individual's privacy by surveillance over them through electronic means or by infringing their data privacy. Further, the integration of AI systems trained on some biased data leads to discriminatory outcomes, particularly in jobs, finance, healthcare, and other sectors. Furthermore, it operates as a black box, and it's complex to understand how the system arrived at a particular result.

International organizations like the United Nations and the European Union came up with certain recommendations and guidelines to regulate AI to minimize the impact of AI on human rights. However, the same is insufficient as there is a lack of international collaboration for a cross-border violation of human rights by AI systems. Further, there is a gap in AI-related regulations in developed, developing, and underdeveloped nations. Due to this, AI-related human rights concerns are not addressed uniformly for all. This further creates a divide and discrimination among the human race, which is required to be addressed carefully.

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