

Artificial Intelligence Access for People with Disabilities: Legal and Ethical Issues Regarding the Use of Reliable AI

K P SENTHILKUMAR M.E.,C.S.E.,
Assistant Professor, Dept of AI&DS,
Kings Engineering College, Chennai-600016.

Abstract:

Emerging technologies and digitalization have an impact on our daily lives and are present in an increasing number of fields. Therefore, researchers have long studied the ethical ramifications of the digitalization process. The debate over law and ethics has expanded due to artificial intelligence's (AI) quick growth. There is no question that AI has the potential to benefit society. But here, the emphasis is on its more detrimental effects. In particular, this article will look at how the law and ethics interact when a disabled person needs some sort of assistive technology in order to participate in society as an equal member. This essay seeks to determine if the EU Guidelines for Trustworthy AI, as a turning point in technological ethics, have the potential to alter the way social and economic rights are now exercised. The ethical standards of "Human agency and oversight" and, specifically, "fundamental rights" are the article's key points of emphasis.

Keywords:

artificial intelligence, digitalization, ethics, technological ethics, and reliable AI.

Introduction

Winston and Edelbach (2011) discuss two separate viewpoints—techno-pessimism and techno-optimism—when describing the difficulty of determining an attitude toward technologies. Techno-optimists place emphasis on the advantages that technologies offer to society and maintain confidence that technological solutions will address any potential problems with technology, in contrast to techno-pessimists who concentrate on the negative aspects of technology and are skeptical of technological solutions. This can be connected to two historical stages of technological analyses from a philosophical perspective: the first being mid-twentieth-century critiques of classical hermeneutic theory that emphasize the harms that contemporary technologies inflict on people, and the second being an empirical approach that views technology as aspects defined socially by local use. Jacques Ellul, a philosopher who thought that technology had advanced at such a quick rate that people could not control it and therefore considered it as rather destructive, is a famous example of the first historical phase. The second phase approach, on the other hand, departs from a general technology approach and adopts a more nuanced approach, looking at local narratives, analyzing each technology separately and empirically, and viewing it within the values and culture of those societies that use the given technology (see, for example, Brey, 2010; Verbeek, 2011).

The origin of ethics is similar to that of the other branches of philosophy; nevertheless, as John Deigh (2010, p. 1) puts it, these concerns "seem simple, yet are ultimately perplexing." These problems have been raised by digitalization, and as a result, academics have long examined the process' ethical consequences. According to philosopher Deborah Johnson (2004, p. 69),

an information society is one in which "human activity and social institutions" are shaped by digital technologies. We are affected by digitalization and developing technologies, which are present in an expanding number of fields (e.g., Ihde, 2020; Kerik Mae & Rull, 2016; Rosenberg, 2020). In addition to conducting extensive study to understand the effects of developing technologies on legal systems, legal scholars are working to discover the best method to govern these technologies (Brownsword & Goodwin, 2012; Kerikmäe et al., 2017; 2018). The emphasis is on the "continuity of persons and technology with the rest of the nature" (Parsons, pp. 6-9), despite the widespread use of contemporary technologies like social media, Twitter, augmented reality, smartphones, and augmented reality glasses. This is true even though both of the aforementioned approaches can be found in current scholarly discussion on the ethical aspects of technology. Not enough consideration is given to the internet and other technologies, which frequently lead to moral and ethical problems. (Deloitte, 2019; Jobin and colleagues, 2019).

Beaver et al. (2019, pp. 9–25) make the worrying claim that contemporary societies are alarmingly uneducated about digital ethics in their book *Understanding Digital Ethics*. They call attention to concerns about technology control, agency, and moral responsibility, making comparisons to the well-known moral philosophy thought experiment known as the "trolley problem" when discussing autonomous automobiles, for instance. The two literacies that make up digital ethics, according to the authors, are ethical literacy and digital literacy. Ethical literacy is the ability to grasp developing ethical dilemmas and to be motivated to act on them. Therefore, having a sufficient degree of both digital literacy and critical thinking skills is vitally essential in order to develop the requisite understanding of digital ethics.

The debate over law and ethics has expanded due to artificial intelligence's (AI) quick growth. Humans have already been replaced by AI in many tasks, and this "preplacement" process is progressing quickly (see, for example, Joamets & Chochia 2020; Kerikmäe et al., 2020). Margit Sutrop (2020) explores the scenario in which AI surpasses human intellect and the ensuing necessity to harmonize AI with human values while also outlining potential obstacles to such a process. Technology's effects on "the future of humanity" are discussed by Boucher (2018a, p. 5), while Kritikos (2018a) claims that new moral and ethical standards are brought about by technology. All of this demonstrates that selecting the "right" approach to regulating technology from an ethical standpoint is not an easy task.

Nevertheless, the Ethics Guidelines for Trustworthy Artificial Intelligence (hereinafter Guidelines) were unveiled in 2019 by the EU Commission High-Level Expert Group on AI. The Guidelines, which emphasize that "AI systems must be human-centric" (European Commission, 2019, pp. 4, 10, 37) and that trustworthiness is a prerequisite for people and societies in developing, deploying, and using AI systems, have compiled the most crucial values that "the whole Europe" should adhere to in the process of developing technology regarding AI.

Three criteria should be met for AI to be considered trustworthy: it must be legal, moral, and robust. In order to uphold the "foundational values of respect for human rights, democracy, and the rule of law," all of these components should be utilised or "work in harmony and overlap in their operations" (European Commission, 2019, p. p. 4; European Commission, 2019). This means that one must start from the principles derived from fundamental and human rights, democracy, and the rule of law when deciding the attitude toward technologies and striving to unite the concept of digital ethics as a whole. The aforementioned ideas are strongly tied to social and economic rights, which unquestionably develop a human-centric

nature. The Guidelines also provide a non-exhaustive list of standards that human agency and oversight, technical robustness and safety, privacy and data governance, transparency, diversity, non-discrimination and fairness, societal and environmental well-being and accountability should all be met by AI systems in order to be trusted. 2019 European Commission Based on the idea that AI systems should both act and have human oversight, this article focuses on human agency and oversight.

There is no doubt that artificial intelligence (AI) can have a positive impact on society, but it is unclear how the morality and legality of trustworthy AI can be applied in a situation where a disabled person needs some sort of assistive technology in order to participate in society as an equal member. especially when considering the interaction between economic and social rights in this. The paper explores whether the Guidelines, as a turning point in technology ethics, have the power to alter the ways that social and economic rights are currently applied by drawing on theoretical, social, economic, and legal literature, political documents, and legislative acts. The nature of economic and social rights¹ gives the states unchecked power to decide to what extent the AI systems are human-centric, improve individual development and well-being, and ensure equal access to social and economic opportunities. If this is the case, the principles focusing on fundamental rights provided in this document will remain nothing more than a slogan that will never be adhered to (European Commission, 2019, p. 9).

Beginning with a review of the underlying legal principles that trustworthy AI is built upon, the essay goes on to describe where and how economic and social rights fit into this framework. It examines the idea of social and economic rights and explains how they are used in practice as well as the key issues with doing so. The essay goes on to analyze how reliable AI is being used in practice to safeguard disabled people when they are exercising their economic and social rights. It explores the primary causes of why the weak have not benefited from social rights. Since the emphasis is solely on economic and social rights, cultural rights as such have not been mentioned in the debate in this article. People in the amount to which they are entitled, and how this reflects the reliable AI ethical ideals. The conclusion makes recommendations for factors that states should take into account when formulating laws and creating legislation to ensure that reliable AI has been deployed.

The importance of economic and social rights as a foundation for reliable AI: According to the Guidelines, a system must adhere to these three criteria over its whole life cycle in order to be considered trustworthy AI: It should be 3. robust, both from a technical and social perspective, since even with the best of intentions, AI systems can cause unintentional harm. It should be 1. lawful, complying with all applicable laws and regulations; 2. ethical, ensuring adherence to ethical principles and values; and 3. robust. 2019 European Commission, page 2

Trustworthy AI is based on fundamental rights and reflects ethical concerns: "its central concern is to identify how AI can advance or raise concerns to the good life of individuals," it should enhance individual development and well-being and ensure equal access to social and economic opportunities, and it should provide a disproportionate amount of protection to vulnerable groups (European Commission, 2019, p. 9).² As members of this category, people with disabilities shouldn't be denied equitable access to the advantages and opportunities that AI offers (European Commission, 2019, p. 10).

The Guidelines provide legal justification for trustworthy AI that is primarily based on EU legislation, including EU treaties and the EU Charter of Fundamental Rights. However, it also makes reference to global agreements. Fundamental rights, human rights—particularly,

human dignity—individual freedom, democracy, equality, non-discrimination, and solidarity—as well as citizens' rights—have all been specifically emphasized. 2019 European Commission, p.

However, defining vulnerable populations might be challenging (see Arnardóttir, 2017). According to the Guidelines, due to the variability of vulnerable persons, "[n]o generally accepted or broadly agreed legal definition of vulnerable persons exists. The Guidelines define a vulnerable group as "a group of persons who share one or several characteristics of vulnerability" (European Commission, 2019, p. 38). What qualifies as a vulnerable person or group is frequently context-specific. People with disabilities are among the most vulnerable.

The EU Charter states that "The Union recognises and respects the right of persons with disabilities to benefit from measures designed to ensure their independence, social and occupational integration, and participation in the life of the community" (Art. 26). Human rights, including economic and social rights, are safeguarded by a number of international agreements. The International Covenant on Economic, Social, and Cultural Rights recognizes economic, social, and cultural rights as human rights. The most significant of these, the Universal Declaration of Human Rights, provides several economic and social rights, including an adequate standard of living, the right to adequate food, the right to health, the right to social services, the right to social security, etc. The rights of individuals to an economic, social, and cultural life include those pertaining to employment, social security.

Despite the fact that economic and social rights are positive rights—"an affirmative right to something" (Fares, 2019, p. 284)—the obligations of states with regard to these rights vary from treaty to treaty. They are generally split into three categories: respecting (not interfering with the enjoyment of the right), protecting (not allowing others to interfere with the enjoying of the right), and fulfilling (adopting suitable actions to ensure the right is fully realized) (OHCHR, 2009, p. 11). According to "progressive realisation," which refers to taking "appropriate measures towards the full realisation of economic and social rights to the maximum of their available resources," states have obligations in relation to economic and social rights (OHCHR, 2009, p. 11). States frequently interpret.

How much of society's wealth can the state legitimately extract through taxation? What percentage of that amount ought to be devoted to each of the legitimate goals the state might pursue with these resources? After this macro-allocation is resolved, how is the amount devoted to each legitimate goal determined? These are just a few of the normative and empirical questions of an intractable nature that Ferraz (2008) discusses when answering the question what "available resources" means. 2008's Ferraz, p. 587.

Economic and social rights are frequently also protected by the constitution in many jurisdictions. The specific level of these social goods that each individual is entitled to is not determined by constitutional principles because they are abstract in nature. According to Minkel and Prakash (2015, p. 11), constitutional rights represent an individual's distinctive justiciable right if economic and social rights are more like "directive principles" that the state should adhere to as a goal. A government has more alternatives to "play" with the allocation of the state's financial resources since constitutional principles are too wide and the actual "individual justification" occurs at the level of a legal act. The scope of this sovereign obligation is difficult to ascertain: the substance.

There have been numerous disputes on whether a court can order the state to provide (more) resources for a certain economic or social right. Even when they lack the resources, nations must "demonstrate that they are making every effort to improve the enjoyment of economic and social rights" (OHCHR, 2009, p. 14). Unfortunately, it's still not entirely apparent what would constitute a minimal standard. As Schwarz explained: "the rights [which] may call on government to create something that was not there before" (Schwarz, 1993, p. 556), it should be recognized that this criterion can change in different states and will be raised if the state's welfare would grow. Given the advantages AI could provide, it seems sense.

A number of international and EU laws give people with disabilities unique legal rights. According to Boucher (2018b, p. 6), the UN Convention on the Rights of Persons with Disabilities calls for developing "a comprehensive framework for the empowerment of people with disabilities" and undertaking or promoting research and development of new technologies, including information and communications technologies, mobility aids, devices, and assistive technologies, suitable for people with disabilities. Priority should be given to these types of technologies. accessible information regarding mobility aids, devices, assistive technologies, innovative technologies, and other forms of help, support services, and facilities for people with disabilities (UN, 2006, Art. 4).

Non-discrimination against people with disabilities is covered by the European Pillar of Social Rights, the EU Charter of Fundamental Rights (Articles 21 and 26), and the Treaty on the Functioning of the European Union (Articles 10 and 19). The European Accessibility Act and the Medical Devices Directive, among other legal documents, establish guidelines for people with disabilities in the areas of labor, education, and health law.

If disabled people have any state obligations or rights, there must be a system in place to guarantee these obligations and rights. The issue of the judicialization of economic and social rights is brought up in order to prevent a state from announcing too quickly that there are not enough resources. According to Pastor y Camarasa, "judicialization of economic, social, and cultural rights is controversial—even though the solution to ensure the implementation of these rights has been seen through the court who obligates government to use resources in a certain way, this can damage the separation of powers" (Pastor y Camarasa, 2016, pp. 216-217). 2019 Also Fares "Critics have long held that the enforcement of these rights in the courtroom would be inherently undemocratic and unmanageable," it is stated on page 281) of the book.

As stated on page 2 of their 2015 publication, Minkler and Prakash state that "wise or clever policy interventions, whether big or small, can only work to the extent that policymakers are willing to initiate, fund, monitor and enforce them." According to international law, a state is required to report on its adherence to international human rights law (Boyle, 2019, p. 111), yet all too frequently, "sustainable, people-centered, and human rights-based development" is absent (Crăciunean-Tatu, 2018, pp. 30-31). The judiciary has the authority to issue judgements about economic and social rights, according to the UN Human Rights Office, and this is avoiding "overstepping its constitutional role" (OHCHR, n.d.). Finding "the right balance between the technological development and human rights protection" is vital, the Council of Europe Commissioner for Human Rights has emphasized, and "human rights should be strengthened by AI, not undermined" (Council of Europe, 2019, pp. 5-6). "We need full consideration of human rights in the context of AI design and operation," write Alemany and Gurusurthy (2019, p. 92).

All of this demonstrates that when extending social and economic rights to people with disabilities, international law has a clear need to interpret reliable AI in light of basic rights. Despite the fact that "laws are mandatory rules," Law and ethics are closely associated since ethics is frequently represented in laws and affects our behaviors in following, implementing, or even interpreting the laws, even if ethics are voluntary rules (UKEssays, 2018). When discussing international agreements, it is clear that these legal documents reflect certain moral principles—behavior that might be regarded as ethical. The authors of this article contend that the inclusion of a particular ethical rule in a legislative provision does not preclude it from remaining an ethical rule. Simply put, the ethical norm has more validity.

implementation of reliable AI in real life

Despite the fact that all of the aforementioned legal tools support the protection of people with disabilities, there are too many instances that show they are still out of reach for disabled people due to the high cost of the tools that could lead to "further social inequalities" (Boucher, 2018b, p. 11). 200 million individuals with low vision lack access to low vision assistive items, according to the World Health Organization. 466 million people around the world suffer from hearing loss, but just 5% to 15% of those in need have access to wheelchairs. Less than 10% of the world's demand is now satisfied by hearing aid production. (WHO, 2018) These figures show how much assistive technology is required, assuming that most of it is AI-based. Without a doubt, the matter is significant from the standpoint of the state, the EU, or possibly the entire world. According to Latonero (2018, p. 25), while AI may eventually have an impact on the development of human rights and dignity, assistive technologies that are currently in use in Europe "are not always used to their full potential with regard to their integration into social services, health, education, and employment" People with impairments are typically less successful in social integration, mobility, and work than others.

Such social exclusion can make it impossible to evaluate the needs and capacities of vulnerable groups on an individual basis (see Arnardóttir, 2017). If they had easier access to AI, this might be changed, and the For their demands, AI systems had been created specifically. There are numerous ways to modify AIs to meet the needs of people with disabilities because they may learn algorithms to recognize images, sounds, and even language. Unfortunately, it is common for people with disabilities to be in poverty (see European Disability Strategy 2010-2020, COM(2010) 636 final), which makes it likely that the state will either not provide enough support to help these people obtain AI or will not be interested in creating AI systems for people with disabilities.

This will impede the "well-being of individuals, and their capacity to develop their full potential in life" (Malgesini et al., 2017, p. 3). According to the EU Disability Strategy 2010-2020, "the EU market for assistive equipment is devices are pricey and remain fragmented. The demands of persons with disabilities are not effectively reflected in the policy and regulatory framework, neither for the creation of products nor services. Given these circumstances, it is both unavoidable and dubious that the individualized collective well-being that AI systems are supposed to increase will be attained. 2019 European Commission, p. According to WHO data, 1 billion people require one or more assistive goods, but only one in ten people in need have access to them today.

However, more than 2 billion individuals will need at least one assistive product by 2030, with many older people needing two or more due to an aging global population and an increase in non-communicable diseases. (WHO, 2018) A significant portion of these goods may be AI-based aids that maintain or enhance a person's functionality and independence, hence enhancing their wellbeing. When discussing AI-based assistive technology, examples include intelligent contact, transfer a wheelchair-bound person from their bed, use a guiding dog, etc. (see Vercelli et al., 2017) There is no question that these tools would enhance the wellbeing of people with disabilities. Names of Boucherspoons, speech indicators, eyeglasses or hearing aids, bathing aids, the ability to track the behavior of the disabled, and social support.

Accessibility as a human right, privacy by design, improved informed consent procedures, user-centered technology design, autonomy of choice in using AI, preservation of human care availability, creation of suitable ethics oversight structures, introduction of a new classification system for AI, and assurance of their use's safety are all issues that need to be addressed. Boucher (2018) 2018b, p. The list could go on forever because there are so many factors to take into account while creating AI. It is clear that AI systems "should not reinforce patterns of social inequality" (Kritikos, 2018b), but rather contribute to the well-being through a distribution of economic and social opportunity that is equal (European Commission, 2018). promoting the final socioeconomic gain (2019, p. 9). Unfortunately, as was covered in the preceding section, when used improperly, the nature of economic and social rights can be a barrier to such distribution.

Conclusion

The debate over law and ethics has evolved as a result of artificial intelligence's (AI) quick development. The Ethics Guidelines for Trustworthy Artificial Intelligence, developed by the European Commission, outlines the most crucial principles that "the whole Europe" should adhere to when creating AI-related technologies. Some of the principles include, among others, the fundamental rights guaranteed by the EU and international law, such as those that should enable equal access to social and economic opportunities, including for people with disabilities (European Commission, 2019, p. 9). This brief analysis demonstrates that, despite the existence of numerous legal standards, whether at the national, EU, or worldwide levels, which should be adhered to during the development of AI technology, The realization of economic and social rights can readily be blocked by their very nature, and it is debatable whether the Guidelines' ethical standards have been upheld. It is well known that allocating funds from the state budget is a political decision, even though the process of creating a state budget and distributing it among state regions adheres to special rules to ensure the rule of law covering also the principles of trustworthy AI, particularly human agency and oversight covering fundamental rights. However, it will be more probable that people with disabilities will have equal access to the advantages and opportunities if the principles of trustworthy AI are used from the earliest stage of the policymaking process. opportunities presented by AI, even if doing so does not immediately result in economic gain for the government, and such a course of action is ethical within the parameters of the Guidelines.

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