

ARTIFICIAL INTELLIGENCE AND CHILD RIGHTS: AN ANALYSIS

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ABSTRACT

AI is a field of science with many approaches, advances in machine learning, deep learning and promotes a paradigm shift in nearly every field of the tech industry. AI is used in cities for public safety and traffic organization purposes; in hospitals, through applications in devices that assist doctors in detecting diseases; in education with the use of algorithms that create possibilities for customized learning or facial recognition technologies; and entertainment. As Artificial Intelligence-based technologies are increasingly integrated into modern life the children are also affected by this. The potential impact of artificial intelligence on children deserves special attention, given children's heightened vulnerabilities and the numerous roles that artificial intelligence will play throughout the lifespan of individuals who are born in the 21st century. While there are many unknowns about Artificial Intelligence, we do know that it will have an effect on nearly every aspect of our lives and that in many ways the impacts will be greater for children from how they are conceived and born to the resources and learning methods available to them, as well as the occupations they will be trained for. This truth entails a great deal of both opportunity and risk. The problem is that when AI harms children, the harm will last a long time and follow them into adulthood. However, AI for children has a ton of potential in terms of improving learning, growth, protection, and opportunities. It's crucial that all these discussions take place now because the future well-being in every nation depends on the stable growth of children and the cost of disappointing our future generations is immense.

Keywords: Artificial Intelligence, Machine Learning, Deep Learning, Child Rights

INTRODUCTION

The terms artificial intelligence, machine learning, and deep learning are often used interchangeably by the general public to reflect the concept of replicating “intelligent” behavior in machines. Generally, AI refers to a sub-field of computer science focused on building machines and software that can mimic such behavior. Machine learning is the sub-field of artificial intelligence that focuses on giving computer systems the ability to learn from data. Deep learning is a subcategory of machine learning that uses neural networks to learn to represent and extrapolate from a dataset. There are numerous ways that machine learning and deep learning processes impact children’s lives and ultimately, their human rights, and how artificial intelligence technologies are being used in ways that positively or negatively impact children at home, at school, and at play.ⁱ

THE ROLE OF ARTIFICIAL INTELLIGENCE IN CHILDREN’S LIVES

From how children play, to how they are educated, to how they consume information and learn about the world is expected to increase exponentially. A number of initiatives have started to map the impact of AI on children.ⁱⁱ Thus, it is imperative that stakeholders come together now to evaluate the risks of using such technologies and assess opportunities to use artificial intelligence to maximize children’s wellbeing in a thoughtful and systematic manner. Stakeholders should work together to map the potential positive and negative uses of AI on children’s lives and develop a child rights-based framework for artificial intelligence that delineates rights and corresponding duties for developers, corporations, parents, and children around the world. The potential impact of artificial intelligence on children deserves special attention, given children’s heightened vulnerabilities and the numerous roles that artificial intelligence will play throughout the lifespan of individuals who are born in the 21st century. As much of the underlying technology is proprietary to corporations, corporations’ willingness and ability to incorporate human rights considerations into the development and use of such technologies will be critical.

THE CONVENTION ON THE RIGHTS OF THE CHILD

The United Nations Convention on the Rights of the Child (CRC),ⁱⁱⁱ adopted by the UN General Assembly on 20 November 1989,^{iv} provides the international legal framework for children's rights.^v The CRC is the most comprehensive legal framework that protects children--defined as human beings 18 years old and under as rights bearers.^{vi} Until a few years ago,^{vii} the CRC did not contain an actual enforcement mechanism, which was considered a manifest flaw. Children could not file complaints, and the Convention could not be tested in specific cases by the courts. In 2011, however, the Optional Protocol on a Communications Procedure was adopted^{viii} which allows individual children to submit complaints regarding specific violations of their rights under the Convention and its first two optional protocols. The Protocol entered into force in April 2014. In addition, the UNCRC has a symbolic function and a strong moral force.^{ix} The UN Committee on the Rights of the Child monitors the implementation of the UNCRC and issues critical remarks or recommendations.^x It is then up to the national governments to take these into account.

The CRC aims to ensure children's equality of treatment by States. The CRC is the key international instrument on children's rights and represents an extraordinary level of international consensus on the legal rights that children should have.^{xi} The Convention imposes obligations on 195 states parties to provide legal protection for a wide range of rights that inhere in children by virtue of their human dignity.^{xii} Many of these rights inhere in all human beings and were therefore already protected by pre-existing instruments of international law such as the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR). The CRC aims to emphasize that these rights apply equally to children, regardless of their age, and to provide explicit measures to ensure that children can enjoy these rights on an equal basis with other human beings.^{xiii} The Convention grants rights to children across categories often referred to as the three Ps: Protection (from harm, violence or exploitation); Provision (with the resources of services necessary for a decent life) and Participation (in society and in decisions affecting the child).

ARTIFICIAL INTELLIGENCE IMPACT ON CHILDREN

Children are exposed to algorithms at home, at school, and at play. Algorithms shape the environments in which they live, the services they have access to, and how they spend their time. Children play with interactive smart toys, they watch videos recommended by algorithms, use voice commands to control their phones, and use image manipulation algorithms for fun in social media. The presence of AI in children's lives raise many questions. Is it acceptable to use recommendation algorithms with children or to provide an interactive toy if the child cannot understand that they are dealing with a computer? How should parents be advised on the possible impact of AI-based toys on the cognitive development of a child? What should children learn about AI in schools in order to have a sufficient understanding of the technology around them? At what point should a child be given the right to decide about the consents involved? How long should the data be stored? As UNICEF and other organizations emphasize, we must pay specific attention to children and the evolution of AI technology in a way that children-specific rights and needs are recognized. The potential impact of artificial intelligence on children deserves special attention, given children's heightened vulnerabilities and the numerous roles that artificial intelligence will play throughout the lifespan of individuals born in the 21st century.

RIGHTS IMPLICATED BY ARTIFICIAL INTELLIGENCE TECHNOLOGIES

The CRC identifies several rights implicated by AI technologies,^{xiv} and thus provides an important starting place for any analysis of how children's rights may be positively or negatively affected^{xv} by new technologies.^{xvi}

Article 13 which confirms the child-specific version^{xvii} of the right to freedom of expression which includes the freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of the child's choice. The article has a broad scope of application, which certainly extends to the internet as well as any other (future) medium. Another important Article is 16 which state that children cannot be subjected to any arbitrary or unlawful interference by state authorities or by others (e.g., private organizations) with their privacy, family, home or

correspondence, nor to unlawful attacks on their honor and reputation^{xviii} to privacy is directed at the child itself and is to be protected in all situations.^{xix} In the online environment, privacy issues could, for instance, arise with respect to identification mechanisms or with regard to the collection of their personal data by service providers. Furthermore, monitoring a child's internet use could be considered in conflict with the child's right to privacy.

CHILDREN AND SOCIAL MEDIA PLATFORM

Social media platforms that rely on streaming technologies are revolutionizing how adults and children consume media content. Platforms are working hard to ensure consumers maximize their time on these sites. YouTube stands out as the dominant player in this space, especially when it comes to today's youth.^{xx} In 2017, 80% of U.S. children ages 6 to 12 used YouTube on a daily basis. YouTube was the 2016 and 2017 "top kids brand" according to Brand Love studies.^{xxi} In the 2017 study, 96% of children ages 6 to 12 were found to be "aware of YouTube," and 94% of children ages 6 to 12 said they "either loved or liked" YouTube. The YouTube phenomenon isn't just occurring in the United States as YouTube has massive user bases in India, Moscow, across Europe, and beyond. In 2015, YouTube decided to launch a dedicated platform called YouTube Kids as a means to provide safe, age appropriate content for children. On both YouTube and YouTube Kids, machine learning algorithms are used to both recommend and mediate the appropriateness of content. YouTube representatives, however, have been opaque about differences in the input data and reward functions underlying YouTube Kids and YouTube. Lack of transparency about the input data used in algorithms makes it difficult for concerned parties to understand the distinction. More generally, the issue of algorithmic opacity is of concern with both YouTube and YouTube Kids, since YouTube, and not YouTube Kids, continues to account for the overwhelming majority of viewership of children's programming within the YouTube brand.^{xxii}

The situation on YouTube algorithms and how they have impacted many young children is concerning, even disturbing. First, the transmission of child-oriented content is interrupted frequently by automatic advertisements, many of which are inappropriate for younger viewers. Moreover, a recent report on children's safety on YouTube shows that very young children are only 2-4 clicks away from adult content while watching children-oriented

videos.^{xxiii} Corporations are finding ways to target minors in ways that uphold the letter but not the spirit of the rules and in ways that may be opaque to parents and other concerned parties.

CONCLUSION

It's high time the government takes serious action in light of the impact of artificial intelligence on children. Just as India proactively had helped shape the Universal Declaration of Human Rights and gave the world the principle of 'Ahimsa', this country could also galvanize the international community around ensuring an ethical AI for Generation AI. Experts have also expressed their fears over a global AI skill gap. It is critical to democratize who has access to and can build with AI in order to close the gap. We believe that now is the best time to start working on early childhood AI education. The role of artificial intelligence in children's lives—from how children play, to how they are educated, to how they consume information and learn about the world—is expected to increase exponentially over the coming years. Thus, it's imperative that stakeholders come together now to evaluate the risks of using such technologies and assess opportunities to use artificial intelligence to maximize children's wellbeing in a thoughtful and systematic manner. As part of this assessment, stakeholders should work together to map the potential positive and negative uses of AI on children's lives and develop a child rights-based framework for artificial intelligence that delineates rights and corresponding duties for developers, corporations, parents, and children around the world.

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