The effect of Artificial Intelligence on gender equality

United Nations Commission on the Status of Women

Empowering Future Generations: Cultivating Global Literacy and Enlightenment

Forum: CSW
Issue: The effect of Artificial Intelligence on gender equality
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Introduction

In this Research Report wel will try to illustrate the effect of Artificial Intelligence (AI) on gender equality.

In a world where AI becomes more and more important there comes up a huge concern on what effects this may have on women and their safety. This is a very young issue that in many cases does not just have a simple answer, however if we take a look at the root of this problem we can see how this issue is caused and what we can do to solve this, but more on that in the general overview.

Definition of Key Terms

Artificial Intelligence (AI)

AI is an umbrella term for algorithms and methods that perform tasks that were presumed to only be possible using human intelligence.

(Large) Languages Models

A Language Model (LM) is a form of AI that is programmed to conduct a probability equation of the best response it can give to a certain input. A Large Language Model (LLM) is essentially the same, but way more capable version of a LM, a LLM is capable of advanced language processing abilities and this is the AI models most people are familiar with now.

LEDC

Less Economically Developed Country. A relatively poor country that generally has less equality between the genders and this is where the gap in access to technology between the genders is the largest.

MEDC

More Economically Developed Country. A relatively richer country where women, in general, enjoy more equality and where the access to technology between the genders is relatively the same.

Science, Technology, Engineering and Math (STEM)

An umbrella term for the related fields of Science, Technology, Engineering and Math. This is a term that is mostly used in the context of schools and universities. STEM fields are mostly male dominated and this can become an issue in the equality of the genders in AI models.

General Overview

Although more and more women gain access to the internet every year, there still remains a major gender disparity in access to mobile phones. Statistics show that about 300 million more men have access to the internet through mobile devices than women. This divide may cause many disadvantages and danger to women.

Research has shown that women only make up 22% of the people that work in AI and data science fields. This does not only limit diversity but also contributes to the perpetuation of inherent biases in AI systems. When women are excluded to this scale, the development and training in AI models will result in algorithms often reflecting a male-centric world view.

Such biases can lead to numerous negative outcomes, such as giving women wrong and dangerous healthcare recommendations, AI programs that were trained on predominantly male datasets might fail to account for gender-specific medical symptoms, resulting in misdiagnoses or the wrong treatment for ill women. It is important to note that even without AI this happens, especially in the medical field. Many treatments are male-centric because that's what it has been tested on. Another example could be that AI recruitment giving male candidates an unfair advantage if the data reflects workplace inequalities

This blatant discrepancy between the genders in AI highlights the need for women to enter these fields, ensuring that the future of AI is shaped by all perspectives.

Major Parties Involved

UN Women

The UN organisation that strives for programs, policies and standards that uphold the rights for women and aims for all women to live up to their potential.

Women Leading in AI

Women Leading in AI (WLinAI) is a UK based network that has expanded globally. It aims to bring more women into the technology field and foster a space where they are free to bring, and implement their ideas and hopes to ensure that AI does not amplify (gender based) stereotypes and emit prejudices.

OpenAI, Google, and Microsoft

These are some of the global leaders in AI and have produced the largest AI models: ChatGPT, Gemini and Copilot. Most AI traffic is moved to these companies and for this reason these major companies have a huge responsibility in ensuring that their language models do not perpetuate any biases and prejudices.

Timeline of Events

1966	A MIT computer scientist produces ELIZA, a model that could identify keywords and give out a pre-programmed answer
	[etc.]
1980´s	IBM create the first Small Lanuage Model
	…
1991	The World Wide Web (WWW) is launched creating a huge source of new data

2022	OpenAI launch ChatGPT, dramatically reshaping the whole AI space and opening it up to many new innovations to come

Previous attempts to solve the issue

There haven't been many attempts to solve this issue yet, as AI is quite new.

Some related issues that have been attempted to be resolved are, for example, the countless scholarships that are available to exclusively women that help in the funding of their educations in the STEM fields. Another example is equitable hiring processes that many companies have implemented where applicants are only judged on their abilities and that aim to eliminate AI biases in the hiring process.

Possible solutions

This problem will not be easy to fix. This is because some of the possible solutions may take many years to fully work. To reach a point where women are represented equally in AI measures must be implemented to make sure their datasets are also included properly. This could be done by offering women an easier way to access mobile devices by, for example, offering women in LEC's cheaper options for phones, and discounted mobile internet plans. Another option is to make the STEM (Science, Technology, Engineering and Math) fields more accessible to women, by firstly establishing grants and scholarships for young females who want to join these fields, and secondly make the hiring process in these fields more accessible and equitable for women.

It is important that member states can find a short-term international solution to bring an end to the bias currently present in AI. Because even if a situation where everybody has equal access to the internet can be created, the majority of information available online is biased. This could be attained for instance by making strict regulations on the programming of AI models with unbiased information.

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