GENDER AND USE OF AI GENERATED PHOTOGRAPHS: ILLUSION, DELUSION AND MAKE-BELIEF IN THE DIGITAL SPACE

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Abstract

This study examines the influence of gender on use of AI generated photographs, and how they create illusion, delusion and make-belief in the mind of the people. The idea behind this study is because of the proliferation of AI-generated images that have overtaken the social media space. The research method adopted for the study is the qualitative research method, leveraging on extensive review of existing literature, documents and articles from reputable journals. The relationship between AI and the digital space is complex and multi-faceted. AI is used to create new digital spaces and experiences, and can also be used to improve existing ones. However, AI is raising questions about privacy, bias, control, and even the nature of personhood. These are important issues that will need to be addressed as AI technology continues to develop. AI generated photographs are a bit of both-they can be both illusion and delusion, depending on how you look at them.

Keywords: Gender, AI-Generated photographs, Illusion, Delusion, Make-belief, Digital space.

Introduction

Technology has revolutionized almost all human activities (Nwokeocha, 2023). One of such areas is photography and designs.The emergence of Artificial Intelligence (AI) is phenomenal. AI is already interfering with work, which were exclusive reserve of humans, and are doing them even much better. One of such works is photography. AIs have overtaken the industry, replacing human beings in factories and sending millions out of jobs in many civilized nations. Initially, AIs have found expressions in robotics, but now are computer programmes and software, that have infused advanced knowledge and solution mechanism into solving advanced human problems. There is hardly any area of human endeavor that AI is not employed. The next two decades will see AI in control of administration of human affairs in firms and industries. AI is now employed in image creation to replace photography, in firm to replace salesmanship, and we can see it interfere in many areas of work

The trending artificial intelligence (AI) image generation has deeply overwhelmed the digital space so much; and at such has come a long way in its capabilities, most notable in the realm of images and videos. The quick scramble of AI assistance to human and care activities will not be seen as a shutter put amidst its input in human race (Porayska-Pomsta; Rajenda, 2019).

Over the years, technologies based on Artificial Intelligence (AI) were started as innovations rolled out in working space to replace intense human efforts. These happened not only in professional working environments but also at home and in school (Belhadiclate, 2022). In some parts of the world, AI is already enhancing the field of education by enabling a more customisable approach to teach and learn. Additionally, AI technologies have began to change the landscape of health and well-being, particularly within the area of mental health

The origin of AI can be traced back to the 1950s, when scientists and mathematicians began to explore the idea of creating machines that could thinks and make decision like humans. The field of AI really started to take off in 1960s and 1970s, and solve math problems. And in the 1980s and 1990s, AI research focuses on creating programmes that could understand natural language and process images. In the 2000s and 2010s the focus shifted to machine learning and deep learning which have led to the development of AI systems like Siri and Alexa. It is fascinating to see how far the field has come, and how quickly it has

evolved. And the history of AI is closely linked to the history of computers and computing technology.

Looking at the influence AI has created in our contemporary society, one would see a trend among the youth population, and how they have unanimously embraced it to their advantage. Arguably, it can be said that young people are some of the most avid users of AI. And there are both positive and negative implication of AI use on them. On the positive site, AI can be a valuable educational tool for young people, helping them to learn and explore new ideas. Today, AI is used to write academic papers, research and seminer (D'Ignazio; Klein, 2020). However, there are also concerns about the potential negative effects of excessive AI use; such as addiction or a lack of real-world interaction, and the shifting paradigm of intelligence. The development of deep learning algorithms has made it possible to create AI-generated images that are almost indistinguishable from real images, the abundance of freely available image and videos in online media has made it easier for people to create AI-generated content.

Third, social media platform have made it easy for AI generated content to spread rapidly and widely. And finally, the ability to create deep fakes has raised serious ethical and legal concern. (Criado-Perez, 2020).

Interestingly, AI has come a long way in its utmost capabilities, most notable is the realm of image generation and videos as established earlier. Estapirian-Ricardo et al (2021) point that AI-generated images have become very realistic and are increasingly difficult to distinguish from real image. People can develop an unrealistic understanding of AI, which can lead to confusion and misinformation. AI generated images can be used to create deep fakes, which are designed to deceive people and can cause serious harm. One reason is that AI generated images are often very realistic, and it can be difficult to tell whether an image is real or generated by AI. This can lead to people questioning what they see and wondering if they can trust their own eyes.

Another reason is that AI generated images can be used to deceive people leading them to believe something that is not true. Furthermore, AI generated photographs have become trending issues in the digital space, causing public debate on air and creating an illusion of reality. Sadly, the youths who are avid users of the digital space, see these images every day and are likely to disseminate the falsely generated photographs amidst people's lack of

knowledge that AI is used to generate the photos, and as such causing delusion and spreading falsehood. It is noteworthy that the youths have continued to forge false identity and professionalism amidst AI generated photo. A photo taken by AI can assume any kind of background, one can claim to be in a foreign country after using AI to decorate his photos taken in a slum. Both genders have continued to employ AI to design their photos. But the debate is in knowing which gender does so regularly. It is to this end that this study seeks to find out gender evidence and the use of AI generated photographs, and how that causes illusion and delusion among users in the digital space.

Statement of Problem

Artificial intelligence (AI) is one of computer software that can be used to create art, designs and other creative content in a fraction of the time it would take a human artist. It can generate images and videos and these images can be used to create simulation and models that are too complex or expensive to create with other methods.

However, the problems with using AI to generate images is that they can be used to spread misinformation or even disinformation. For example, someone could create an AI image of a politician saying or doing something they never said or did, and then share that image online without any contest. That could be very damaging for the politician's reputation and it could even affect his political career.

AI-generated image have become very realistic and are increasing difficult to distinguish from real image, people can develop and unrealistic image with AI which can lead to confusion and misinformation. Al-generated images can be used to create deep fakes which are designed to deceive people and can cause serious harm. They can be used to manipulate or exploit people emotion. For example, people can generate an AI image of a sad or scared child and use that image to get people to denote money to assist or help the child out of depression. This could be very unethical, since people might not realise that they are being manipulated. So, it is clear that the lack of transparency around AI-generated images can lead to some serious problems.

Principally, this image generation with AI is used by both gender. If one goes online, one would find out that the social media is awash with AI-generated images of people regardless of their gender. They use these images to create a

distorted version of themselves. These images have created illusion (deep fakes and portrayal of reality) and delusion (deep belief even when the images are untrue). This make-belief tends to pose an ethical concerns that become a poser for this study.

Methodology

This conceptual/ desk research aims to examine the influence of gender in the use of AI-generated images and how they create Illusion, delusion and make belief among people . The research method adopted for the study is the qualitative research method, leveraging on extensive review of existing literature, documents and articles from reputable journals

Conceptual Review
The Concept of AI

AI stands for artificial intelligence which is a branch of computer science that deals with the creation of machines that can perform task that normally require human intelligence. This includes such things as understanding natural language, recognizing images and making decision.

AI system are powered by algorithms, which are seas of instructions that tell the system how to process data and makes one important systems to improve their performance over time, by analyzing data and identifying patterns. Machines learning is used in the real- world applications, such as facial recognition and self driving cars. Another important concept is deep learning which is a type of machine learning that uses large neural network to process data.

AI Generated Photographs:

Al-generated images; these are images that are created by AI algorithms, rather than by human artists. They are created by feeding image amounts of data into machine learning feeding large amounts of data into machine learning algorithms which learn to generate new images based on the patterns they find in the data. So, AI generated images are based on patterns, rather than on direct observation of the real world. One concern is that the data used to train the algorithms may be biased or incomplete. This can lead to the algorithms generating images that reflect those biases, which can have negative

consequence. Another concern is that AI generated images may be used to spread misinformation, as they can be very realistic and difficult to distinguish from real images.

Ethical and Security Issues in AI Generated Images

One cannot discuss the advancements in AI image generation without addressing the ethical and security implications deep fakes, or AI-generated videos have garnered attention for their potential to spread disinformation or engage in identity theft. Similarly, high quality AI generated images could be used to create fakes profits fabricate news stories, or deceive in advertising.

This development also carries implications for the digital forensics country. Traditional methods of image analysis, such as pixel irregularities or inconsistencies in lighting may no longer suffice for the identification of fakes. Moreover, as AI evolves, the window of discerning real from fake is closing, requiring new tools and methods for verification.

Illusion and Delusion of AI Image

The illusion aspect of AI-generated images is related to how they can be very difficult to distinguish from real images. They can create the illusion of reality, even though they are not based on direct observation of the real world. The delusion aspect refers to how people can be misted by AI-generated images, believing them to be real when they are not. This can lead to people making decisions or forming beliefs based on false information.

In short, an illusion is something that appears to be real but is actually not, while a delusion is a false belief that someone holds despite evidence to the contrary. So, an illusion is more like an optical trick, while a delusion is a psychological phenomenon.

One example is the "uncanny valley" phenomenon. This refers to the feeling of unease or discomfort that some people experience when looking at very realistic AI-generated images. This is because the images are almost, but not quite, realistic, which can create a sense of cognitive dissonance.

Another example is the use of Ai-generated images in art. Some people argue that they are not "true" art, as they are not created by a human artist.

Types of Illusion

The different types of illusions include:

Optical Illusion: These are illusions that involve your sense of sight.

Audio illusion: These are illusions that involve your sense of hearing.

Olfactory illusions: These are illusions that involves your sense of smell.

Tactile illusions: These are illusions that involve your sense of touch

Gustatory Illusions: These are illusions that involve more than one sense.

Types of Delusions

There are four main types of delusions:

Delusions of Persecution: These are delusions where you believe someone is out to get you.

Delusions of Grandeur: These are delusions where you believe you are more important than you actually are.

Delusions of Reference: These are delusions where you believe random events or objects are specifically related to you.

Delusions of Control: These are delusions where you believe someone is controlling your thoughts or actions.

Gender and AI Intersection

There are several ways that gender and AI intersect. One way is in the way that AI systems are trained. For example, if AI systems are trained on data that is skewed towards certain genders, they may make biased or inaccurate predictions about people based on their gender. Another way that gender and AI intersect is in the way that AI is used to create digital representations of people. For example, AI generated avatars and images can reinforce or subvert gender stereotypes.

One way that AI and gender intersect is through the use of AI-generated images to create "virtual influences." These are computer-generated avatars that are designed to look like real people and are used to market products or promote social causes. They often have highly idealized body types and unrealistic physical features, which has led to concerns about gender stereotypes and body image issues.

Deep fakes on Gender: AI-generated images is deepfakes. Deep fakes are AI-generated images that are designed to deceive people by making it look like

someone said or did something they did not. This can have serious consequences, such as spreading misinformation or damaging someone reputation.

One of the most notable examples of a harmful deep fake is the case of Gabby Petito in 2021, AI-generated images and videos of Gabby Petito were spread on social media, purporting to show her alive after her death. This caused a lot of confusion and distress for her family, and made it difficult for the truth to be communicated. AI generated images are a form of "living falsehood", since they can generate and create false impressions real-world consequences-for example, if someone is impersonated online using AI-generated images. Or, if an AI-generated images is used to manipulate the stock market or other financial markets. So it's definitely a complex issue, with lots of potential for harm.

Transport: In professions related transport, such as taxi drivers, truck drivers, or airplane pilot, the depicted professionals consistently appear seated inside the respective vehicles, learning out of the window, and assuming nearly identical postures. They are also very stereotypical depictions of professions: 100% of the people represented were men, middle-aged and Western, unlike the industries above, which showed younger workers. In this example of the taxi driver and airplane pilot, they are shown in suits, while the truck drivers are shown in shorts and more casual clothing.

Education: In certain professions, women are depicted in a highly stereotypical manner, particularly those related to education: for both primary and secondary education, the images consistently portrayed only women.

University lecturers was also depicted stereotypically, 88% of images showed women. Additionally, the images of professionals depicted at all educational levels predominantly showed young individuals. When representing teachers, the majority were AI systems can perpetuate existing gender.

Theoretical Framework

Two theories were developed on this study, social construction and framing theory.

Social Construction Theory

The social construction theory suggests that our understanding of reality is constructed through our interactions with others, and that language plays a key role in this process. This theory can be applied to gender and AI in a number of ways. For example, the way that we talk about AI often reinforces traditional gender roles Stereotypes. For example, AI assistants like Siri and Alexa are often depicted as female, and are often given subservient roles. This reinforces the idea that women should be submissive and should perform domestic tasks.

Another way to apply social construction theory to gender and AI is to look at know AI is used to construct and reinforce gender norms. For example, some AI powered beauty apps allows users to change their appearance to conform to traditional beauty standards. This reinforces the idea that beauty is something that certain physical features are more desirable than others.

Framing Theory

According to framing theory, the way that the media frames an issue can have a significant impact on public perception. This is certainly true of AI. For example, the media often frames AI as either positive or negative force. On the positive side, AI is often portrayed as a technology that will improve our lives by making things more efficient or solving difficult problems on the negative side, AI is often portrayed as a threat to jobs or as a tool that could be used to manipulate or control people.

However, these different frames can have a big impact on the way people perceive and use AI. For example, if people belief that AI will improve their lives, they are more likely to adopt it. On the other hand, if people believe that AI is a threat to their jobs or privacy, they may be less likely to use it. So, framing theory can help us to understand the public perception of AI, and how this perception affects its use.

Discussion

The field of AI-generated images is evolving at an unpredicted rate, complicating or ability to differentiate between reality and illusion. This presents an array of ethical, security, and legal challenges that society must grapple with in the coming years.

However, the solution may lie in harnessing the same technology that created the problem. As AI-generated images become increasingly sophisticated, so too will our methods for identifying them. The cat-and-mouse game between AI and human discernment is far from over but one thing is certain, the line between what is real and what is generated is blurring, and the implications are both existing and concerning.

The complexity of the issues surrounding AI-generated images calls for active dialogue among technologies, ethicists, lawmakers, and the general public. Only through collaborative effort can we hope to address the nuances of this burgeoning field.

Artificial intelligence image tools have a tendency to spin up disturbing clickes: Asian women are hypersexual. Africans are primitive, Europeans are worldly. Leaders are men, prisoners are black.

These stereotypes does not reflect the real world; they stem from the data that trains the technology. Garbled from the internal, these troves can be toxic rife with pornography, misogyny, violence and bigotry.

Stability AI, maker of the popular image generator stable diffusion XL, told the Washington post it had made a significant investment in reducing bias in its latest model, which was released in July. But these efforts have not from defaulting to cartoonish tropes.

The post found that despite improvements, the tool amplifies outdated western stereotypes, transferring sometimes bison diches to basic objects, such as toys or homes. (Christoph Schuhmann, 2023) co-founder of LAION, a nonprofit behind stable diffusion's data, opined that image generators naturally reflect the world of white people because the nonprofit that provides data to many companies. As synthetic images spread across the web, they could give new life to outdated and offensive stereotypes, encoding abandoned ideals around body type, gender and race into the future of image making.

Conclusion

The relationship between AI and the digital space is complex and multi-faceted. AI is used to create new digital spaces and experiences, and can also be use to improve existing ones. However, AI is raising questions about privacy, bias, control, and even the nature of personhood.

These are important issues that will need to be addressed as AI technology continues to develop. AI generated photographs are a bit of both-they can be both illusion and delusion, depending on how you look at them.

On one hand, they can create a convincing illusion of reality. But on the other hand, they may not capture the true essence of a person or a moment, and can therefore be seen as a delusion. The distinction between the two is not always clear, and it may depend on the specific image and the person viewing it.

Recommendations

Based on the discussion, the following recommendations were made:

- Those who generate images from AI should consider the legal implications of misrepresenting people through make-belief, as this can make them come in contrast with the law.

- AI generated images, no matter how beautifully designed, are different from those captured by camera in real times. Photographers should continue to have faith in their jobs, as AI generated image are mere illusion of realities.

- Government should make regulations to address privacy concerns raised by AI images.

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