AI is gradually hurting consumers' rights to know the truth behind the graph

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Abstract. Nowadays, AI has been applied into various industries in different degrees. However, with the development of the tech, the privacy leaking and information misleading problem is getting worse day by day. In this research, the researcher shows the main accidents and gives advice on how to solve the problem.

Keywords: artificial intelligence; privacy leaking; information misleading.

1. Introduction

Nowadays, more and more smart phone companies are much more likely to invest money on AI relevant function and apps, such as the AI boost gaming mode, AI assistant(Siri, Bixby and so on.), and the AI camera. For example, they announced their phones can take the shot of the moon. Recently, this trend is getting more and more popular because under the homogenization situation, the new response from the camera can easily attract the notice from the consumers and increase sales volume.

But whether the "moon" stored in your new phone is the real moon itself? The answer is definitely NO. Here are the photos shot by my Xiaomi 12S Ultra at the same time.

The picture on the left hand side, is the screenshot which I got on the real-time camera preview window, while on the right side is the final outcome from the gallery. All the process is automatic and you can not decide whether the phone takes the action to deal with the graph. With the development of AI tech, the condition like this will happen more and more usually and such embedded technology are seriously hurting the consumers' rights to know the truth behind the graph.

Such tech is one form of the Deepfake technology which can be used widely in the processing of the photos, drawings, and other visual arts. Tiffany Hsu, technology reporter for The New York Times, announces that,"The technology is also used for parody and satire, for online shoppers trying on clothes in virtual fitting rooms, for dynamic museum dioramas and for actors hoping to speak multiple languages in international movie releases". It is obvious that you can see more and more AI practical use in the near future through different careers. We are much likely to face the condition in the future that even you are chatting with your friends through Zoom or Tencent Meeting, the person on the other side probably is just a fictitious man created by artificial intelligence. In my opinion, there are two main methods which efficiently help to solve the problem. The first method is to ask the countries' governments to set relevant laws to restrict the use of AI, and the second one is to ask regulators to supervise the use of AI regularly and precisely. These methods can solve the problem in two opposite directions efficiently. The following parts will show the reason that why I believe that these are most efficient in solving the possible problems which may happen in the future.

2. Research context

2.1 More and more companies and organizations are working in artificial intelligence

Nowadays, more and more high tech companies put efforts into artificial intelligence industry. According to Erin Griffith who is a New York Times journalist based in the San Francisco bureau, these years, more and more investors are likely to invest a high number of fund into this industry. Different companies have different opinions on this trend, some are enthusiastic while the others keep cautious. The company like Google just keeps low and does not want to reveal more details in the very first stage. The launch of ChatGPT activates the market again. For example, Microsoft invested 10 billion dollars in OpenAI, and they want to develop a much perfect ChatGPT. It is obvious that this industry will be the hottest one in the next decades. However, up till now, the majority of governments in the world have not set relevant laws to better fit the development of AI tech. As the result, there are more and more accidents that violate the rights of us humans. According to Bernd Carsten Stahl et.al, opacity may contribute to concerns about data protection, especially in those cases where the AI requires large data sets. In addition, this raises the issue of responsibility and accountability. There are also worries about future development and then this raises public panic of what the social and ethical consequences of such "super intelligent" machines might be. Only if the governments set the restriction laws, the developers can better develop practical applications and service for consumers. At the same time, the companies can experience a healthy progress in a long period and do not invade the privacy of the users of their products. For example, in December 2022, China has just published *Opinions of the Supreme People's Court on Regulating and Strengthening the Judicial Application of Artificial Intelligence.* In this *Opinion*, it shows the detailed information and restrictions on the AI use in different fields. Although this is just an opinion, it also shows the determination of China on the restriction on the AI use. Not only China, more and more countries are also working on setting laws to restrict the use of artificial intelligence. This behavior just prove that this is one of the correct ways to solve the problem.

2.2 Deepfake tech is gradually hurting the human rights

In the news report from Ryan Daws who is a senior editor at TechForge Media with over a decade of experience, Kendrick Lamar's music video used deepfake tech to imitate other celebrities' appearance. He used the technology as commentary on the Black experience and pay tribute to two people who have died in the recent years, Nipsey Hustle, a rapper from the same part of LA as Lamar, and Kobe Bryant, basketball hero.

"The imitation of another celebrity"AINEWS,Kendrick Lamar uses deepfakes
in latest music video (artificialintelligence-news.com)

The author Ryan Daws also shows the example from Ukrainian President to better support his idea: deepfake technology nowadays is of very low quality and people won't believe it, but later with the development of Deepfake and related AI tech, it may cause major negative effects in the future. Not only the music video, but on Tik-Tok today, more and more videos are likely to use the AI tech to change the owner's face to another celebrity. The youngsters and those group who are low educated will have a high probability to be mislead by the content in the video. One day in the future, maybe someone will suffer from Internet violence or his or her privacy will be invaded but he even doesn't

commit a crime for one time. The possible reason is that someone just uses the AI tech to imitate his appearance to falsify the illegal accidents. It is high time that the different countries' governments should take actions to solve the problem, and the video website should set limitations to all the process in the uploading,watching, and downloading. For example, Bilibili, which is the Chinese YouTube, uses a line of text under the video to remind the watchers, but this is not enough. The platform should set more details and the assessor should check the video in a more strict demand. Recently, the video platforms, such as Youtube, Tiktok and so on are all making progress on their supervisor mechanism to avoid the plagiarism accident and the privacy invading. For example, Tiktok has banned several apps (ZAO, Avatarify...) which used the deepfake technology to change the face of the character in the video to ensure the safety of the privacy of both the user and the actor.

2.3 The risk of privacy leaking is higher under the appliance of artificial intelligence

What's more important, the leak of privacy is also a hard problem that we may need to face in the future. Tatum Hunter who writes about personal technology and its impact for the Washington Post writes the article that talks about the porn-graph created by AI apps. It shows a phenomenon that AI apps can replace the face of the porn actor to another woman. The most terrible thing is that, the use of these porn photos and the porn videos can be used without the control of the law and the permission of the woman. What's more, "People viewing explicit images of you without your consent — whether those images are real or fake — is a form of sexual violence, said Kristen Zaleski, director of forensic mental health at Keck Human Rights Clinic at the University of Southern California." (Hunter) The public amplify the Deepfake harm in a high degree. At the same time, I believe that the obstacle which is the most important is also in the private region.

2.4 Art industry also face the challenge caused by artificial intelligence

Not only about the invasion of privacy, but AI also does harm to the creation of the art industry. Kevin Roose, technology columnist for The New York Times, offers an example: Mr. Allen who used an AI tool to create a drawing won an art competition. Subsequently, there were also many competitors arguing that this is just a plagiarism activity and the art industry will be killed by these artificial intelligence tools. Roose writes,"Some artists defended Mr. Allen, saying that using A.I. to create a piece was not different from using Photoshop or other digital image manipulation tools, and that human creativity is still required to come up with the right prompts to generate an award-winning piece." The artists' opinions do make sense because at the moment, most AI software designed to draw is based on the photos and the graphs created by us humans.

However, Mr. Allen insists on the attitude that he used the AI tool as a new artist and "he" can create art work individually, and also comprehended the reason why human artists are afraid of this tool: the artists thought that the process of creating art by this tool was just an ordinary, rigid process. This article reflects much more thoughts on the question led out in the Introduction of this thesis which is about graph processing in AI camera. Sometimes, the companies will design a special mode to capture a graph of the moon. While, they may add more details and texture on it in order to get a sharp and better looking picture. However, this hurts the profit of the traditional telescope manufacture industry and the scientists may be misdirected by these outcomes. What I need to mention is that I strongly agree on the efforts that the smart phone companies have made on the photo processing. The advanced technology on the dealing with the texture, brightness, colour balance and other features of one photo is helpful for the customers to capture the moment that they want to catch.

The behavior that I am strongly against is that the smartphones add more details on the photo that may not exist totally. If this behavior becomes more and more frequent in the future, the harm is widely and can not be reversed. For the scientists, it will come true that there will be errors in their experiment one day if they are using the devices which can do the auto-progressing on the photo that they collected. For the art industry, it is also negative for the uniqueness and innovation. More and more art works will tend to look same and people will have just one standard of the art works in the future much probably.

3. Conclusion

According to Klein who is a journalist and a political analyst, AI has been used in many careers in different fields. For example, in the history, the automation has already taken away many job chances. What's more,the AI systems can offer guidance on building biologic weapons and it also has been used for predictive policing and judicial sentencing. What can not be neglected is that AI has been in front of us in some fields and we must accept the truth that we can not catch up with AI in such fields any more. But, is the only way for us is to escape from the trend and get back to use the tech which is out of the date? The answer is definitely NO. All of the people in the world can get to offer help to solve the problem.

First, for the different countries in the world, there are two things that they need to be careful with. For example, the governments should set relevant laws to force the smart phone companies to tell the users that whether their phones will add the details which do not exist actually by AI, and every time the user turns on a new function, the operation system should show that whether the AI works in this app, and whether the user's information will be used to "feed" the AI prototype. This step is very important because the Law is the first and the most important restriction. Second, for the regulators, I sincerely call on them to set the relevant methods and rules to supervise the AI use in different industries. Without the supervision on AI development, the art and photography industry are likely to face the disaster in the future. For example, the authority of the authors can not be protected effectively and the effort of the photographers will be spoiled: Because AI can easily imitate the sightseeing in just less than one second while the photographer needs to travel a long distance and wait for a long time to capture the moment. Only the laws and the regular supervision can help to standardize the usage of the AI. I believe that only if governments and regulators try their best to work hard , AI will surely be widely used in different careers well and help us humans to realize the fourth scientific and technological revolution.

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