SOC41130 AI and Society

Ethics of AI and face recognition technology and racial bias.

AI stands for Artificial intelligence. By definition artificial is man-made and intelligence is the power of thinking so in a nutshell AI is a man-made thinking power. AI plays a big part in every aspect of our life. The way we live our lives today is very different from just a few decades ago. For example, the way we do our shopping, the way we eat, the way we make friends, the way we communicate and interact with other people, the way we involve in politics and make decisions, these all must have been just a utopian dreams say about 50 years ago. We shop online through hundreds of different commercial apps. We search for the best or nearest or chippiest restaurants to eat at. We make friends on social media. We express our political opinions and debates on Facebook and tweeter. Political, social, and business decisions are made based on data. These changes are all due to the inventions and development of various forms of AI (Elliott, 2019).

However, we may not be as aware as we think we are when it comes to AI and our lifestyles today. We also may not be that aware of at what cost we are consuming the services that AI claims it provides. I think the question of 'at what costs' can only come through understanding the costs themselves because by design they might not be so obvious. Though, these arguments might be very generic when talking about AI. Let us discuss the ethics of facial recognition technologies usages in the area of security and law enforcement.

With the advancement of AI many developed countries have and are intending to move towards more use of AI particularly in the area of security law enforcement. For example, the US, UK, and China are already using facial recognition technology for identifying criminals. Ireland is also intending to use the same kind of technology as they claim, to detect criminals and search for missing people (Quann, 2022). The use of facial recognition technology is not a new idea though. Google and Facebook have been using this for so long that identifies our friends in photos and offer to tag them. We simply take the offer and tag the photos to friends in a single click. How fantastic! Though possibly we do not think about the data about us that these companies have (Brinckerhoff, 2018). Thanks to the power of machine learning and deep learning algorithms.

But how fair is the algorithm's outcomes could be when it comes to identifying criminals on street via surveillance cameras? Because such algorithms are created based on available data so the outcome will also be based on that data. Facial recognition systems are used widely by police departments

across the United States police departments. There are many recorded cases in that people have been arrested wrongly due to inaccurate facial recognition algorithms. Perkowitz (2021) explains the facial recognition system as the computerized approach that analyses human faces and identifies them by comparison to database images of known people, meaning previously identified as criminal in this context.

In February 2019 Nijeer Parks, a black man was mistakenly arrested and accused of shoplifting and attacking a police officer in Woodbridge, New Jersey. The arrest happened due to a false identification of facial recognition algorithms. The facial recognition system had tagged his driving license photo as a matching image from the surveillance video. He spent 10 days in jail and paid a \$5,000 legal fee to defend himself (Perkowitz, 2021). A similar case happen to Michael Oliver, a black man in July of the same year. He was found not guilty because his tattoos did not match the tattoos of the person in the image who was under investigation (Perkowitz, 2021). Likewise, in January 2020, Robert Williams, also a black man and a father of two little girls was arrested wrongfully. He was handcuffed and arrested in front of his wife and children without being told what he had done wrong. He was jailed overnight. After testing his fingerprints and DNA he was found to be not guilty. Also when a police detective met him in person he recognized that he was not the same person as the person in the surveillance image (Williams, 2020). The arrest was made also due to computer algorithm misidentification. The police were looking for a theft from a store and they simply trust the algorithm and decided to arrest Robert Williams without additional evidence.

These cases tell us that there is a significant problem with facial recognition technology in investigating criminals. Research by Klare et al. (2012) shows that people who are labeled black and female have systematically been lowered in accuracy in the face recognition systems used by the US police. This is a systemic bias towards people of color and women. Also Buolamwini & Gebru's (2018) studies show the persistent inaccuracies in algorithms in identifying the faces of particularly black people. According to their research Asian people, African Americans, and native Americans were up to 100 times more likely to be misidentified by facial recognition tools compare to white people. The reason for these kinds of outcomes was that Asian, Black, and native people were underrepresented in population size compared to the size of historically recorded criminal data in the US. So it can be said that the inaccuracies in identifying the faces of racially different people are inevitably discriminative. This is the result of some invisible but systemic racial biases which is embedded in the algorithms through inequality in data.

(Perkowitz, 2021). argues that facial recognition algorithms are being incorporated within security and surveillance in the US has already a history of racism and inequality. Proportionate representation or accountability in data matter a lot when it comes to operationalization in the criminal investigation

through such AI. It is because face recognition technology relies on machine learning algorithms that are trained with labeled data (Caliskan et al. 2017). This systemic racial bias in security and law enforcement in a so-called highly democratic country like the US is not apart from human humans rights violations. However, we can argue that the racist outputs of algorithms' is the inevitable consequence of the social context in which the formulas and procedures are designed. We tend to think that computer does not make mistakes or that its calculation is much more accurate than we human do. This leads us to invest more trust in algorithmic results and predictions. As results sometimes we make very narrow decisions at the cost of people's basic rights. However, at the end of the day computer is not that intelligence. It is we humans who make the computer work the way we want, manipulating them with the data we have. AI will perform exactly according to the logic given to it. Computers are just adding machines they simply carry out what they are instructed to do. These all fall into how and who designed the AI with what kind of intention and what kind of data have been used, matter the most. If we want to have these systems built in such a way that they produce fair and accountable output we need data democracy.

Reference

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