Facial and speech recognition

Ethics Essay
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Nowadays, most people are aware of facial recognition as a password alternative on mobile devices. However, facial recognition is also a central security tool in a large number of countries [1]. Thanks to the development of artificial intelligence, this biometric surveillance approach is able to verify an individual's identity. Though facial recognition is a powerful technology, it also raises privacy concerns and ethical controversy, especially within its applications in law enforcement. This essay will discuss how different countries regulate face recognition within law enforcement and what particular ethical issue this technology brings about.

Facial recognition technology has, with no doubt, a wide range of applications. The technology has the potential of helping law enforcement in identifying and locating suspects, preventing crimes, finding missing persons as well as conducting faster investigations [2]. It is in other words a cost and labour effective tool. The issue here does not lay in a lack of beneficial usages rather the accuracy of today's facial recognition technology and for purpose it is used.

In the United States of America, a considerable number of federal agencies are using face recognition systems to investigate criminal activity. The states of California, Oregon and New Hampshire have taken a preemptive decision to prohibit the police from using body-cameras equipped with face recognition technology because its accuracy is considered too poor. However, live facial recognition used through other instruments, like static surveillance cameras, is tolerated [3]. Yet, face recognition systems are mostly owned by non-federal entities. A study conducted by GAO found that among 14 agencies who admitted using such systems, only one agency knew what system was in operation. The agencies were thereby asked to investigate the privacy and accuracy risks of using these systems provided by non-federal entities [4]. This study points out/highlights the lack of rules on facial recognition systems among federal agencies in the country.

The European Commission has recently (April 2021) published a draft with regulations for artificial intelligence. This proposal aims at restricting the use of biometric identification practices, including face recognition, that could result in pervasive surveillance. The EU Commission intends to forbid the use of live facial recognition (LFR) by law enforcement [5]. Indeed, the LFR software has multiple technical issues that affect its reliability. A particular concern about this technology is the humans' reaction to the output of the LFR. The algorithm could generate incorrect results, which would lead to a biassed decision-making by the individual monitoring the system. Furthermore, the algorithms are trained on a finite dataset, resulting in more biases among under-represented types of faces [6].

False-positive rates among facial recognition technologies exhibit demographic differentials, ‘’with a factor of 100 more false positives between countries’’[7]. False positives are also higher in women, eldery and children than men [8]. These variations of false positives may lead to wrongful arrests and incarcerations as well as violent police actions which can further add on the pre-existing inequalities within law enforcement. Due to discriminatory law enforcement practises, mugshot data is overrepresented by black people which created a feed-forward loop, which continues to recycle the bias.

It is important to mention that individuals do not have a vote in the matter of public surveillance. Faces of people are stored in databases used by law enforcement without their consent. Though facial recognition technologies within law enforcement are reserved for fighting crimes on one end, it is also used in logging the daily life of citizens [9]. Facial recognition technologies in China are used as a tool to keep an eye on their citizens, assigning social credit scores to issue out benefits to those who “behave” according to the government's standards [10], erasing the line of data privacy. Knowing that everyday small actions are monitored and scored, one's behaviour might become restrained and artificial, resulting in a sense of constraintment.

Though facial recognition technology itself can be considered a neutral at its best, the way it is trained and used is what results in positive and negative consequences for the society as a whole as well as the individual. Knowing that today's facial recognition technologies are biassed, it must not be used without caution.

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