

Part A.

- 1) This article is meant to persuade the reader to take an action about technology use.  
Before reading this article did you have a similar or different opinion than the author does about facial recognition?

Before reading the article, I only ever thought of facial recognition as an easy method for unlocking important data on my devices, such as my bank account or password vault. Due to the fact that I never really considered the implications of security errors, I had a different opinion than the author before reading the article - I believed facial recognition was a beautiful and perfect technology.

- 2) Did your opinion change from reading the article? If so, how did it change, and what specific facts led to that change? If not what about the article supports your opinion to stay the same?

Yes, my opinion changed after reading the article. Buolamwini convinced me throughout their article that more thought about the security and use cases of facial recognition needs to be considered. When they discussed the possibility of false positives for the purpose of identifying perpetrators, I immediately began to worry how a mistake could devastate a person's entire life. However, Buolamwini also mentions in the article that people of color are 10 to 100 times more likely to have facial recognition programs incorrectly identify them (creating a false positive situation), and while yes it is a striking contrast to caucasian people, I do wonder what the baseline for error is. I am not surprised to find out it is a flawed system, but I am hopeful that such errors can be amended and the technology can move forward. Overall, because of this article, I am much more wary about the use of facial recognition in everyday life.

- 3) Imagine if you were in a similar position to the author, and you saw a technology with which you were familiar, and you saw some potential problems with the way the government was using the technology. Would you speak up? Why or why not?

I would like to believe that I would speak up, however, formulating thoughts about why something could be unethical and detrimental to society is a far cry from writing an article that falls under heavy scrutiny by the media and government. Perhaps if I truly felt that I was the sole person with the knowledge to understand why something would be unethical or detrimental, I would feel obligated to speak up. But because I value a certain amount of privacy and online anonymity (if you Google my name, you will not find hundreds of websites agreeing/disagreeing with whatever I produced), I am probably more likely to leave it to someone else who has a stronger desire for the hot seat.

- 4) Imagine if you worked for a company that was discussed in an article that you read about the harms of a technology that the company used as a major part of the business. Would you let the company know the error of its ways and help them fix the error? What would you propose as a solution?

I think I would start by having conversations with co-workers about the situation, and if I find that I am in a position to influence those above me to change the company's direction, I might try. To come up with a solution, I would recommend that a group of influential people in the company

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sit down together and have a really honest conversation about the ethical grounding of the company, where the company is headed, and how to alter course before things get worse. However, if I disagree with a company's methods/ethical standards that sells me a product - pillows for example - I would simply not buy their pillows and recommend to those in my sphere of influence to do the same. Similarly, if I felt I would not be able to make a true difference in the company's direction, I would probably try to leave the company to work someplace more ethical and bring as many people with me as possible. To be sure the company has a harder time filling our positions, I might recommend to everyone that left with me that we should document our grievances with the company online for new applicants to see when they research the company.

Part B.

1) Which approach has a bigger impact?

Economically, ID.me by far has a greater impact with facial recognition used for identity verification. If facial recognition was a perfect product that could be easily accessed by anyone, it would be a perfect method for safely securing people's identities. However, this is not the case, and companies that attempt to claim near-perfect facial recognition products to use for identity verification (like ID.me) can cause serious issues for ordinary people. Ethically, AlgoFace has a greater impact because the company upholds itself to a moral standard to provide consumers with a product that will not jeopardize their human rights.

2) What are 3 pros and 3 cons of each approach?

Pros for using facial recognition include:

- An easier method for legal identity verification. Instead of constantly handling important documents such as Social Security cards, birth certificates, and/or passports, a person's identity can be verified with their face and a driver's license (or equivalent).
- An easier method for login security. In the past, a common issue with account security was the strength of a user's password - did the user use upper and lower-case characters/numbers/symbols? Do they use the same password for many different accounts? Facial recognition \*theoretically\* solves this issue with a security mechanism that cannot be broken by a malicious attacker.
- An easier method for medical identity verification. If a person in need of help's identity can be verified solely by their face, their medical history can be accessed much easier, allowing for doctors to provide better treatment.

Pros for not using facial recognition, but just anonymously analyzing faces include:

- Improved abilities to study driver attentiveness
- Optimized contactless fever detection
- Improved ability to verify the (lack of) use of medical personal protective equipment, such as facemasks

3) Which company's products would you feel safer using? Why?

Although I would feel safer using AlgoFace because of the company's dedication to user privacy, their products are not useful to me in any way. I have no need for a smart mirror or

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virtual makeup artist products, but I do have a strong need for newer, easier methods for identity and login authentication. So while AlgoFace is safer, I think it is imperative that facial recognition technology continues to develop with the intended purpose of identity verification.