

ENSF 611: Assignment #1

1. What does AI ethics mean?

As AI is growing every day, we can clearly see its impact on our daily lives' whether its education, work lives or many more areas. Being as a student, I believe it is my responsibility to learn how to use AI properly and ethically. As the core principle of AI is fairness, transiency, privacy, accountability and safety. I will try making sure that the technology I use or create does not create any harm, discrimination to me and others or any kind of unfair towards my education as well. By understanding the AI ethics, I can assure to use AI for fairness, privacy and safety which can make our lives better and equal more.

2. A) After watching the video, I have felt concerned towards discrimination to certain races but also, realised that it has not created intentionally so there is need to improve it. As AI is created by humans so there can be number of errors in the creation and we should always look forward and motivated to make it better, fairer and more transparent.

B) 1. The importance of diverse Data: As per video, if the training data images comes from only certain races or colors then it can be very difficult for AI to recognise others that's what happened to Joy.

2. Huge scope of Improvement: There is huge concern rising that AI will take over everyone's jobs but from what I see and researched there is still huge areas of improvement for AI that will not only help in job market but will take AI to next level to make our lives easy.

3. Human oversight is necessary: I have realised that I does not matter how accurate algorithm we have created, we should always review and recheck its decision specially for sensitive matter like law enforcement, hiring employees or many more.

3.A) I took the example from our class lecture on AI Ethics which is based on "Finance".

Online link: <https://youtu.be/E1cktwguPys?si=-SGeH08fYUOYdJVO>

Second link: https://developers.google.com/machine-learning/crash-course/fairness/types-of-bias#historical_bias

B) As discussed in class, the loan approval system unfairly judges applicants based on their color, race, gender and marital status and assign them lower score. The

reason behind is the algorithm is built on historical data which reflects social norms and stereotypes.

C) Historical Bias: Historical Bias is based on the data stored in history and in our history the major reason of declining loan applications is having certain race, gender and marital status.

D) Money plays major part in everyone's life and being a woman, we already face way more discrimination than men. I felt it personally because being international in a new country and on top of that being a woman is tough. Growing older I want to solve these existing issues in society and want to help building a system which can treat everyone equally whether they are men, women, white, black or brown.

E) According to me, there should be audit of data which is the root cause of the problem. Organisations should check why certain individual has low credit score, why system is not approving. They should do these system audit checks time to time. Also, we should rewrite the algorithm based on new audits to avoid this problem as much as possible. Even AI gave the decision, there should be human review to make final decision.

4.A) I will keep full transparency with my professors and TA's if I take any kind of help from AI. Second, Even If I take help from AI, I won't ever copy and paste stuff without doing full research and investigation because everything AI provide can't be correct.

B) Yes, software companies should pay for copyrighted materials. Because it is not ethical for someone to use someone else's content without permission and it's not legal as well. There are different laws which are built to stop these kinds of issues. As we discussed in class, there are many on-going law-suits based on this. Also, it's not fair to the person who spends the time and resources to create the content.

C) The use of AI to replace employees. Instead of using AI to eliminate people from the organisation, they should use it to be more focus on finding expertise, creating less error and make them use it for the efficiency of organisation.

Reference's:

<https://chatgpt.com/c/68ccb071-f7ac-832c-a7c6-8557f559675f>.

<https://www.sciencedirect.com/science/article/pii/S2666659620300056>

<https://chatgpt.com/c/68cca3ec-5318-8333-9c4c-1404017b36db>

<https://news.harvard.edu/gazette/story/2020/10/ethical-concerns-mount-as-ai-takes-bigger-decision-making-role/>

