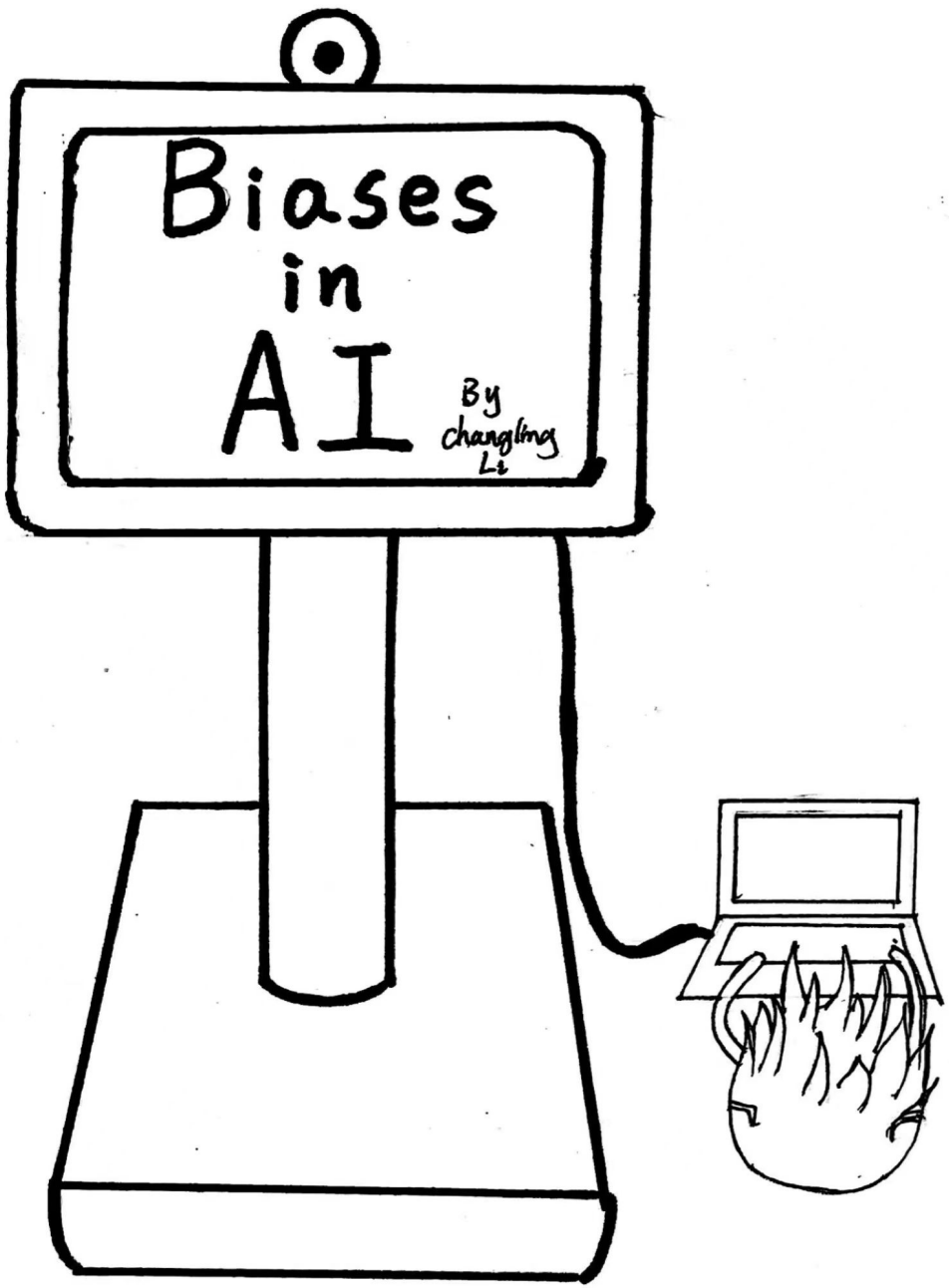
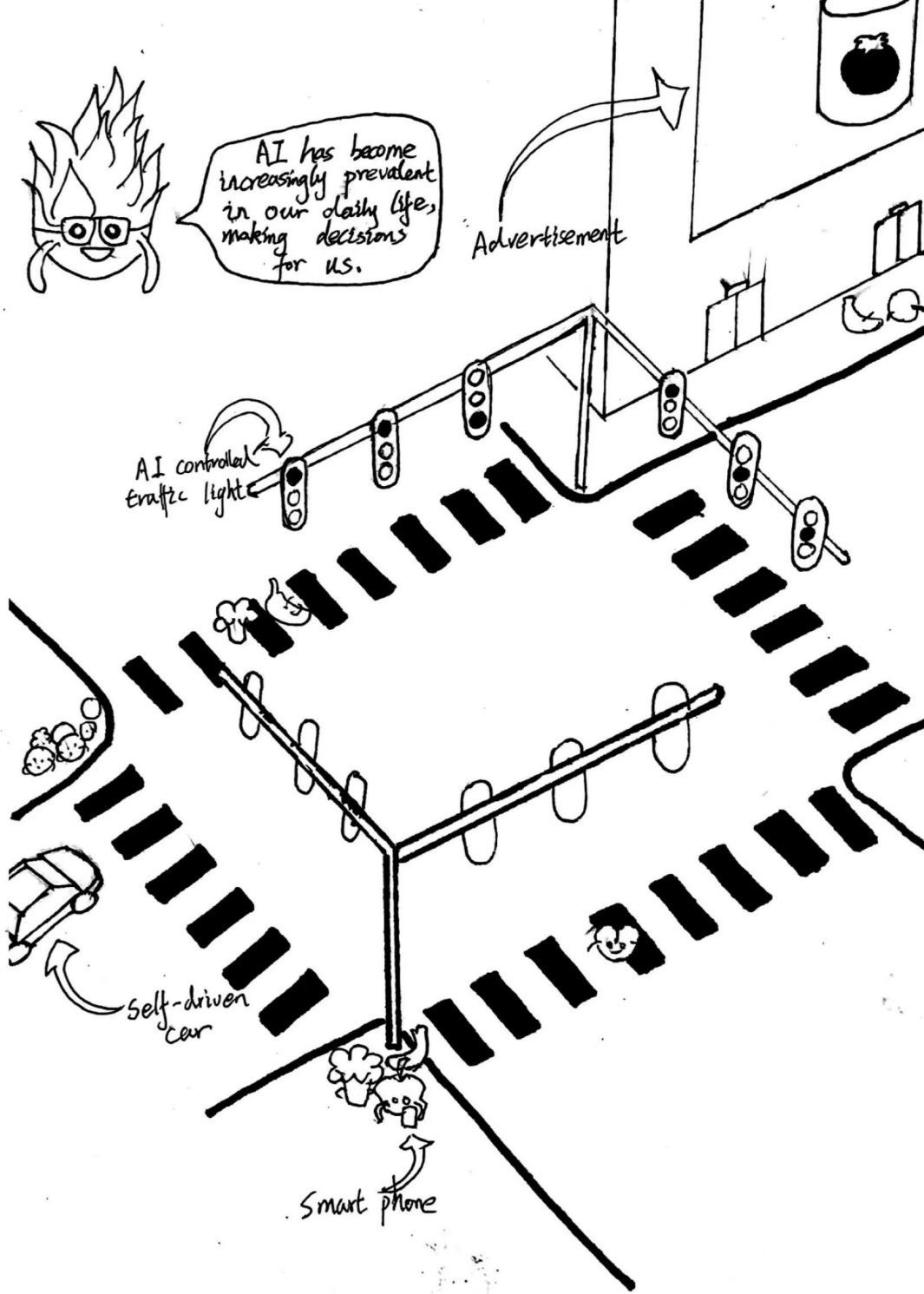
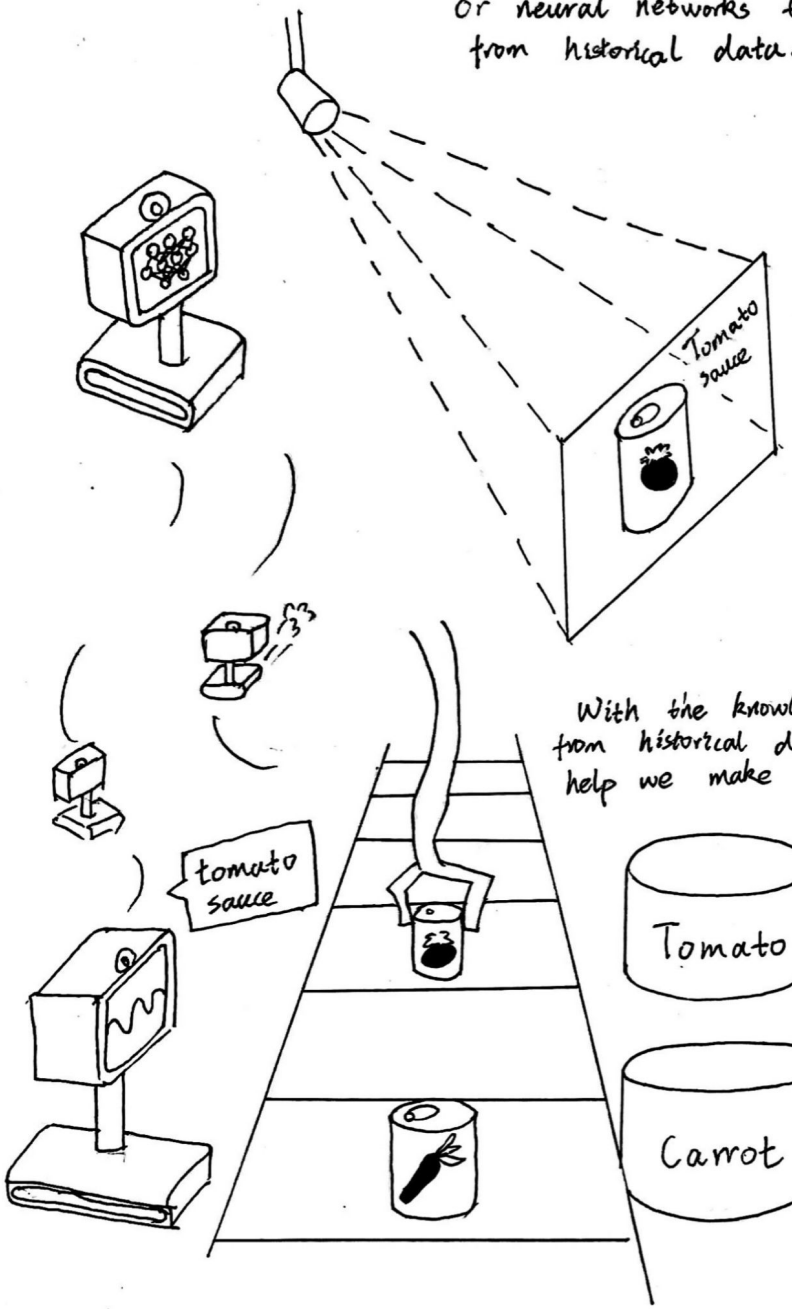
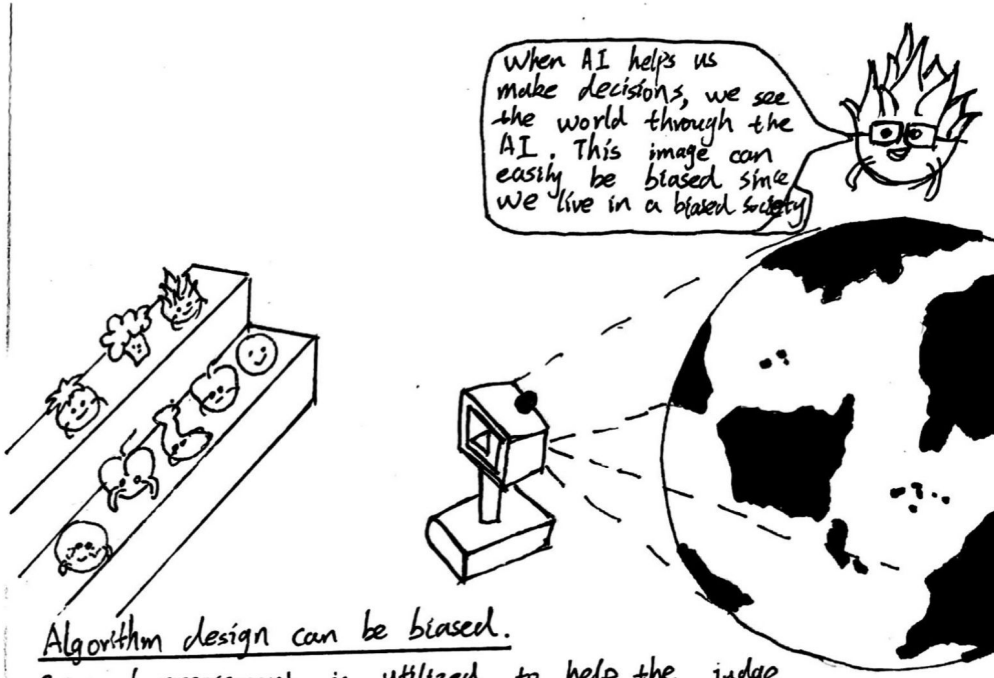

Biases
in
AI
By
Changling
Li


AI has become increasingly prevalent in our daily life, making decisions for us.
Advertisement
AI controlled traffic light
Self-driven car
Smart phone

AI is a set of algorithms or neural networks that learns from historical data.

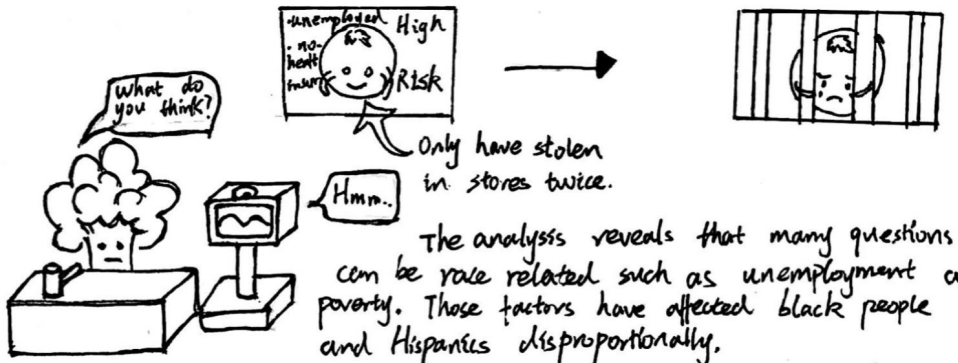


With the knowledge gained from historical data, AI help we make decisions.



Algorithm design can be biased.

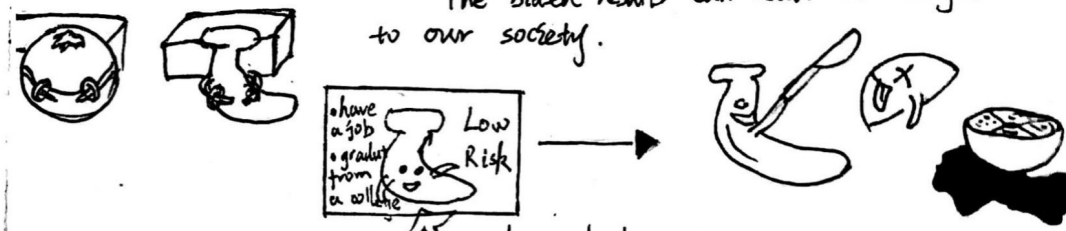
Criminal assessment is utilized to help the judge decide the sentence. Even though the algorithm does not ask racial related questions, the results tend to mislabel people of color as high risk.



Only have stolen in stores twice.

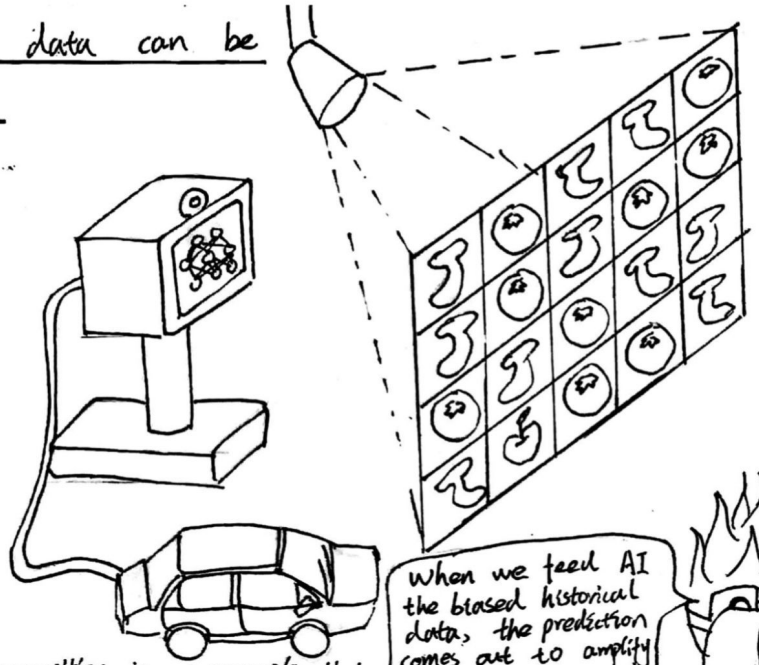
The analysis reveals that many questions can be race related such as unemployment and poverty. Those factors have affected black people and Hispanics disproportionally.

The biased results can lead to danger to our society.



have broken into houses and hurt the families three times

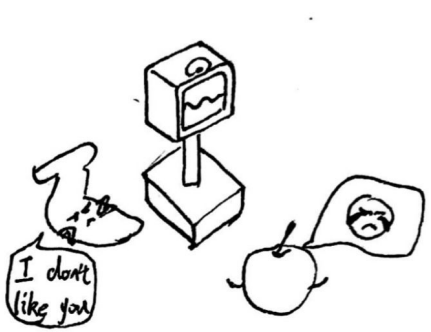
Historical data can be biased

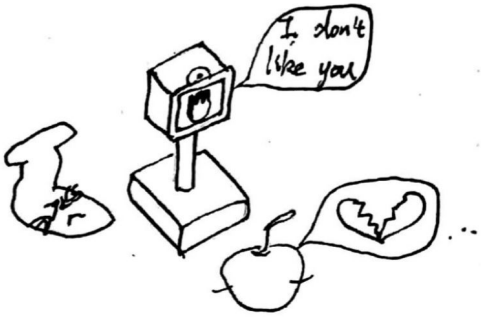


When we feed AI the biased historical data, the prediction comes out to amplify the biases.

Facial recognition is an example that tends to biased due to the unbalanced data. Research shows that when one race is over-represented in the training data, AI does better at recognizing that race but become bad at others.

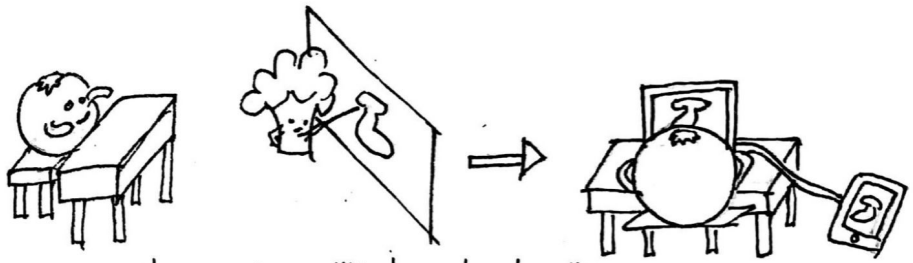
When such a technology is applied to self-driving cars, our lives can be threatened.



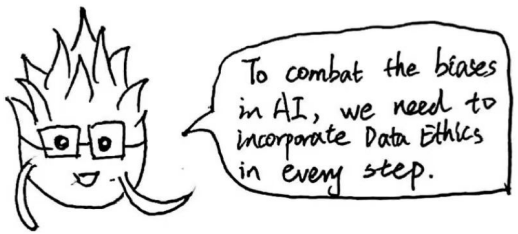


AI biases originate from the biases in our society. Without the careful consideration, AI amplifies the existing biases and exacerbate.

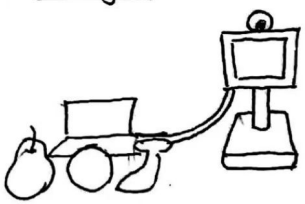
On the other hand, the lack of relevant education causes such phenomena to continuously appear and lead to discrimination towards marginalized groups.



The passive attitude of education promotes the acceptance of the issue.

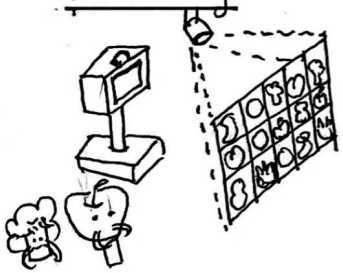


Design

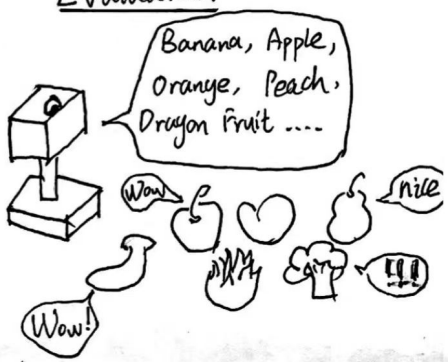


Data Ethics refer to more than data itself. It is a general term that includes every step of development of any new technologies that use statistical data.

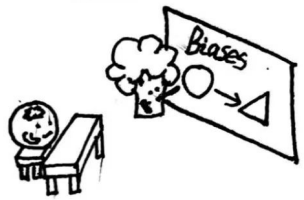
Trainning



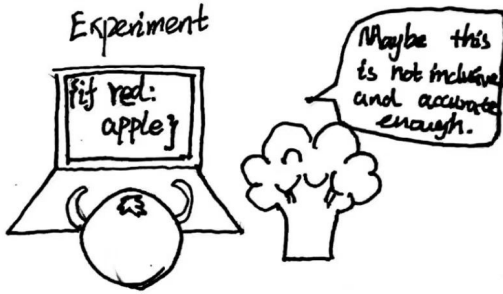
Evaluation



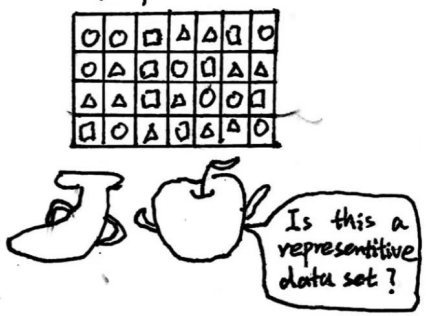
Lecture

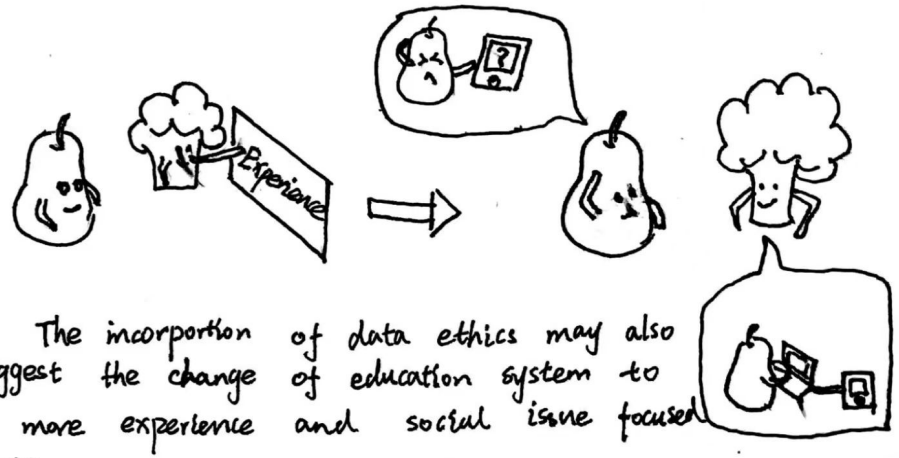


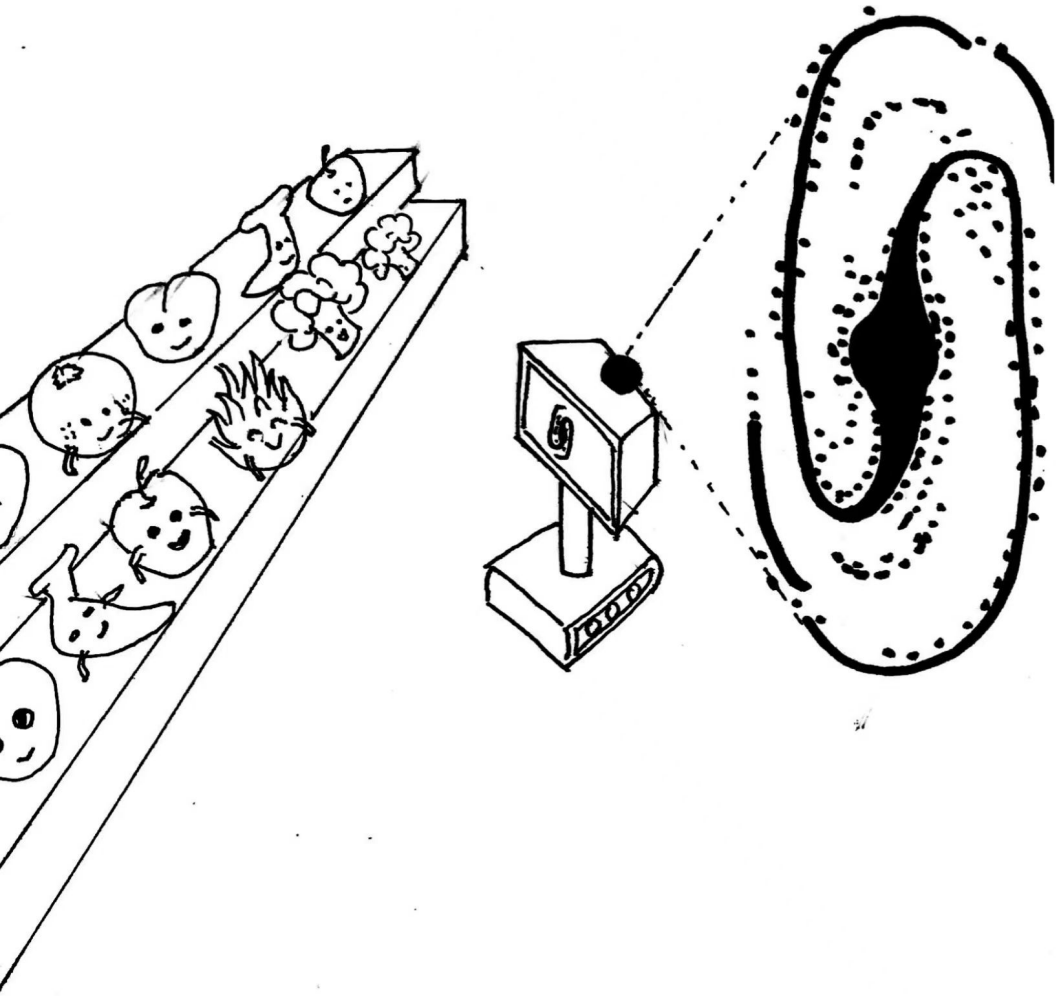
Experiment



Profession





The incorportion of data ethics may also suggest the change of education system to a more experience and social issue focused one.

With Data Ethics, we can see a fair image of the world through AI !