

→ No IT companies come under MSME. All IT companies considered a company in India. They are considered similar to shops.

→ For a very long time no new job has been developed in IT sectors. New employees were able to replace the old employees.

→ In 19's America realize that IT sector has potential to cause outside harm.

→ If so much more given to less companies to ~~less~~ can cause harm.

→ Google was one of the first company to develop Google ethics ~~council~~ council. Every ~~the~~ technology will undergo ethics. After some time in 2017 whole Google ethics council were fired.

→ The aim of any company is to increase company shareholder value. ~~The~~ Company has to exploit its employees. In AI area most companies are self-regulate.

→ Companies having ethics council is not really a ~~solution~~ solution.

→ Green washing is the use of environmental language to regulate environment. Ethics washing came from Green Washing. It's not new.



Techno solutionism & Reification  $\rightarrow$  17<sup>th</sup> Century Victorian Britain. Streets are live. Somehow you were teleported to that time through time machine. You found that women were not considered people. Women were considered properties of father or husband. Another portal opened. Somebody gives the Pressure cooker to reduce labour for women. It's not the solution. Because, now they will do more work.

$\rightarrow$  If you have any society problems you can't solve them by accelerating. You are doing the job faster but not have a complete solution.

$\rightarrow$  Who came with Techno Sol<sup>s</sup> was Moxo

$\rightarrow$  There are lot's of children died before some age. To ~~measure child weight an~~

$\rightarrow$  Reification  $\Rightarrow$  making categories & making the real is reification. First you make categories, then make a race b/w leaderboards & new people entered. ~~You now are~~ Creating reality by creating categories is reification. ML is an example of reification.

⊛ ~~AI as~~ ⊛ EOD, entire AI is ~~an~~ a technology.



→ Copyright strikes on YT happens by ML algorithms. ~~Soon~~ Sometimes, they wrongly strike innocent. Using code in the decision of human or politician order.

→ Every technology has some inherent qualities that may cause accident somewhere. You have to always hold human accountable for technology failures.

→ Takes the information, throws ~~it~~ in the blackbox & blackbox learns pattern. It's the training.

→ You shows some data to blackbox & blackbox reads the pattern & predict them is validation. (We know data)

→ Now, you don't know data & blackbox gives label after reading the pattern it's testing.

→ Training data that you throw to the blackbox it is image, feature & o/p.

→ Technology evolves fast → Another policy  
→ Principle Component analysis to reduce dimension.



- Jargon  $\Rightarrow$  ① Cross Validation  $\Rightarrow$  let say you have 10 sets of data & used 9 for training & one for validation. We do repeated validation. It's called cross-validation.
- ② Assume you have a variety in category data. Data doesn't come once. It accumulates over time. Thus, it will take a lot time to train. You should only add new images to your data instead of previous one that were already trained. You ~~to~~ pick from the new data set that is useful.
- It's active learning
- ③ You have various algorithm to work on ML task.
- ④ You might need lots of training examples but you don't have. Oracle, creates synthesis data.
- ⑤ ML algorithm becomes too much confident in training. The datapoints in training are so similar that ML becomes confused over new point & gives wrong answer.  $\rightarrow$  Overfitting
- ⑥ A model which can gives indication that can gives answer why ~~to~~ it gave that answer is ~~see~~
- ⑦ Bias