# Ethical Data Science is an Oxymoron

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Ovid Jacob

### Introduction

- o Technical limits of AI/ML
- o Ethical limits of the surveillance economy
- o How to proceed form: communalism; self-sovereign identity

#### Technical limits of AI/ML

Problems with supervised learning in Al and ML:

- o limited (biased) data set
- o just an extension of expert systems (from 1960's !). Hubert Dreyfuss was right!
- o therefore, program does not know what to do in a new situation NOT already programmed!

# More on Technical limits of AI/ML

As for unsupervised learning AI and ML:

o not used much, not mature enough. We don't know enough about thinking to program this.

o well-known issues with this, like the Uber accidental killing of pedestrian.

#### Ethical limits of the surveillance economy

In the present surveillance economy, ethical considerations conflict with business decisions.

Business usually wins!

## More on ethical limits of the surveillance economy

There are many ethical issues in:

- o data gathering: consent; limits/terms of data use
- o data labeling: use of offshore labor to do this manually!
- o data stewardship: who is minding the data trove?
- o algorithmic design: how to keep bias from coming into it
- o final data analysis: interpretation

## New model of work - communalism

A flat organization, little to no hierarchy

Decisions are made democratically, via modified consensus.

When managerial tasks are needed, they are delegated to a person selected for a limited amount of time to do this.

Leadership roles are rotated alphabetically among all the members of the group, as an example.

#### More on the new model of work

All members of the group are paid equally.

Profits or loses are shared equally among the members of the group.

The business is owned by all the members of the group in equal measure.

The business will NEVER go public, stay within the control of the group.

### Self-soverign Identity

New models of data ownership and management, away from present surveillance model:

- o HyperLedger Indy project (Linux Foundation)
- o Inrupt and the Solid project (W3 Consortium, Tim Berners-Lee)
- o Blockchain (!?) as a supporting technology