Machine Learning and Economic Inequality

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April 19, 2021

An exciting line-up

Day 1

- Abigail Adams-Prassl (Economics)

- Reuben Binns (Computer Science)

- Rediet Abebe (Computer Science)

- Joshua Loftus (Statistics)

- Paul Goldsmith-Pinkham (Economics)

Day 2

- Pauline Kim (Law)

- Jeremy Adams-Prassl (Law)

- Salome Viljoen (Law)

- Abigail Jacobs (School of Information)

- Moustapha Cisse (Computer Science)

How should we evaluate the social impact of AI?

- Automated decision-making is increasingly common in consequential settings:
  Hiring, consumer credit, bail setting, news feed selection, pricing, ...

- Much recent work is concerned with the "fairness" of such automated decisions:
  "Is unequal treatment rationalizable by profit maximization?"

- In this conference, the goal is to instead discuss the impact of AI on inequalities.

- This corresponds to two conflicting normative paradigms:
  1. **Just deserts** (e.g. Libertarianism):
     "Does everyone get what they deserve, based on their merit?"

  2. **Consequentialism** (e.g. Utilitarianism, welfare economics):
     "How does this policy / algorithm impact the wellbeing of those affected?"

Fairness versus equality

- Fairness is about **treating** people of the same "**merit**" independently of their **group** membership.

- Equality is about the (counterfactual / causal) **consequences** of an algorithm for the distribution of **welfare** of different **people**.

Examples when they are in conflict:

1. Increased surveillance / **better prediction** algorithms:
   Lead to treatments more aligned with "merit."
   Good for fairness, bad for equality.

2. Affirmative action / **compensatory interventions** for pre-existing inequalities:
   Bad for fairness, good for equality.

Means of prediction and agents of change

- ML and AI are largely about optimization.
  - But who's objective function is maximized?
  - Ownership and control of data and algorithms determine who gets to pick the objective.
  - Why is most of AI dedicated to maximizing ad-clicks?
  - How could alternative ownership structures look like?

- Who is the audience for work about the social impact of AI? Who's perspective do we take?
  - Most commonly:
    - Corporations maximizing profit,
    - subject to constraints of avoiding litigation or bad press for discrimination.
  - How about addressing other stakeholders?
    - Workers and unions,
    - government regulators and policymakers,
    - consumers and NGOs, ...

Conference policies

- Talks are 40 minutes,
  followed by 10 minutes discussion time,
  and occasional breaks.

- Panel members can simply unmute themselves for questions and comments.
  Everyone else, please post your questions in the Q & A box,
  and Binta will read out your question or call on you to ask it.

- During talks, please limit yourself to clarifying questions.
  Reserve comments and criticisms for discussion time.

- Talks are live-streamed and recorded.
  They will be available for later watching on Youtube.

- Conference program:
  https://maxkasy.github.io/home/ML_inequality_conference/

- Youtube channel:
  https://www.youtube.com/channel/UCB3VHmtU-Acta1o0wbzWaag

Let's get started!