The 2016 U.S. Election and HCI: Towards a Research Agenda

Answers to the two panel questions

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- **Q1: What issues need to be addressed**
  - Computing-induced income inequality
- **Q2: How can we have a greater impact?**
  - Consider negative broader impacts
  - Build more systems
  - Eschew circular firing squads

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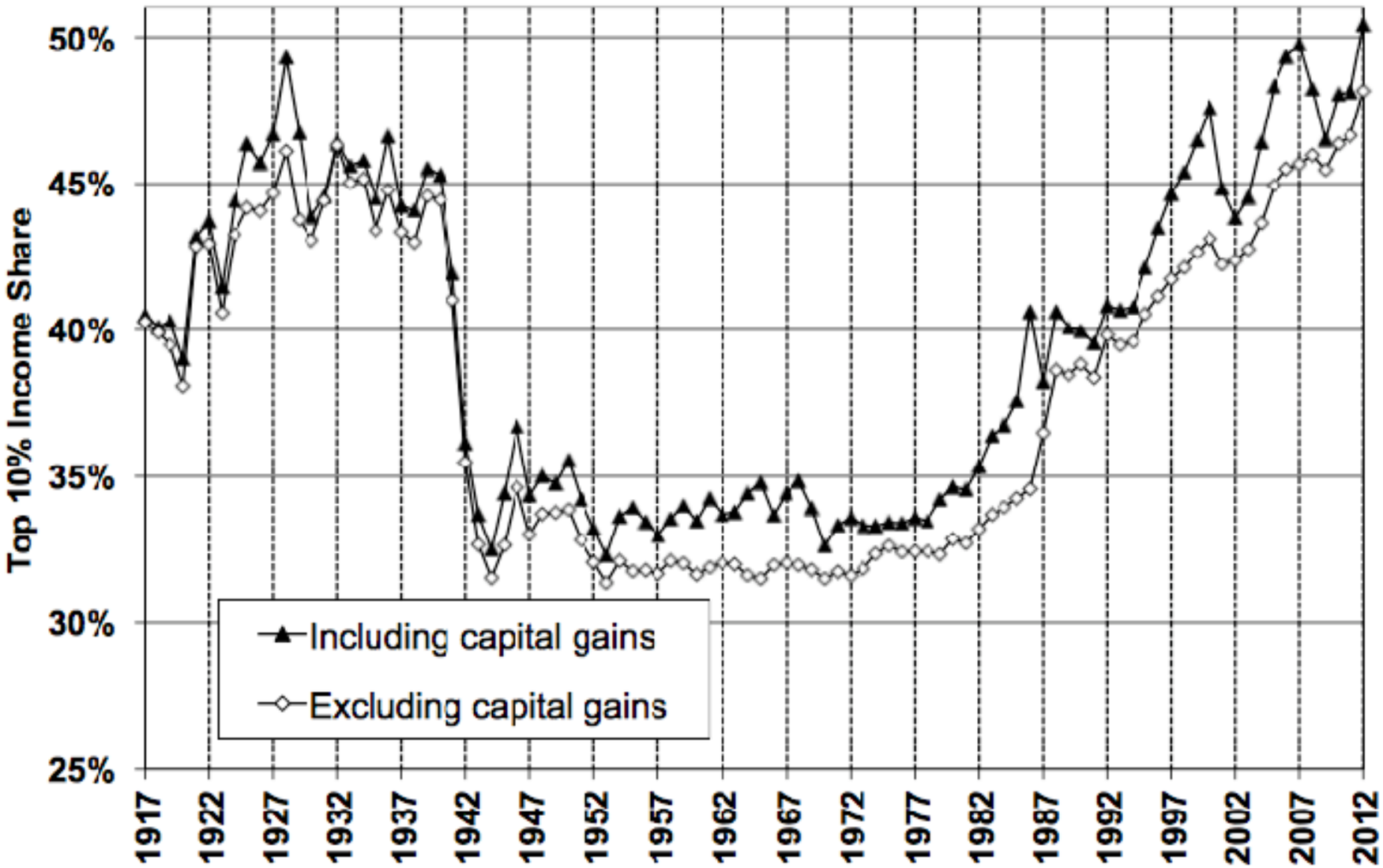
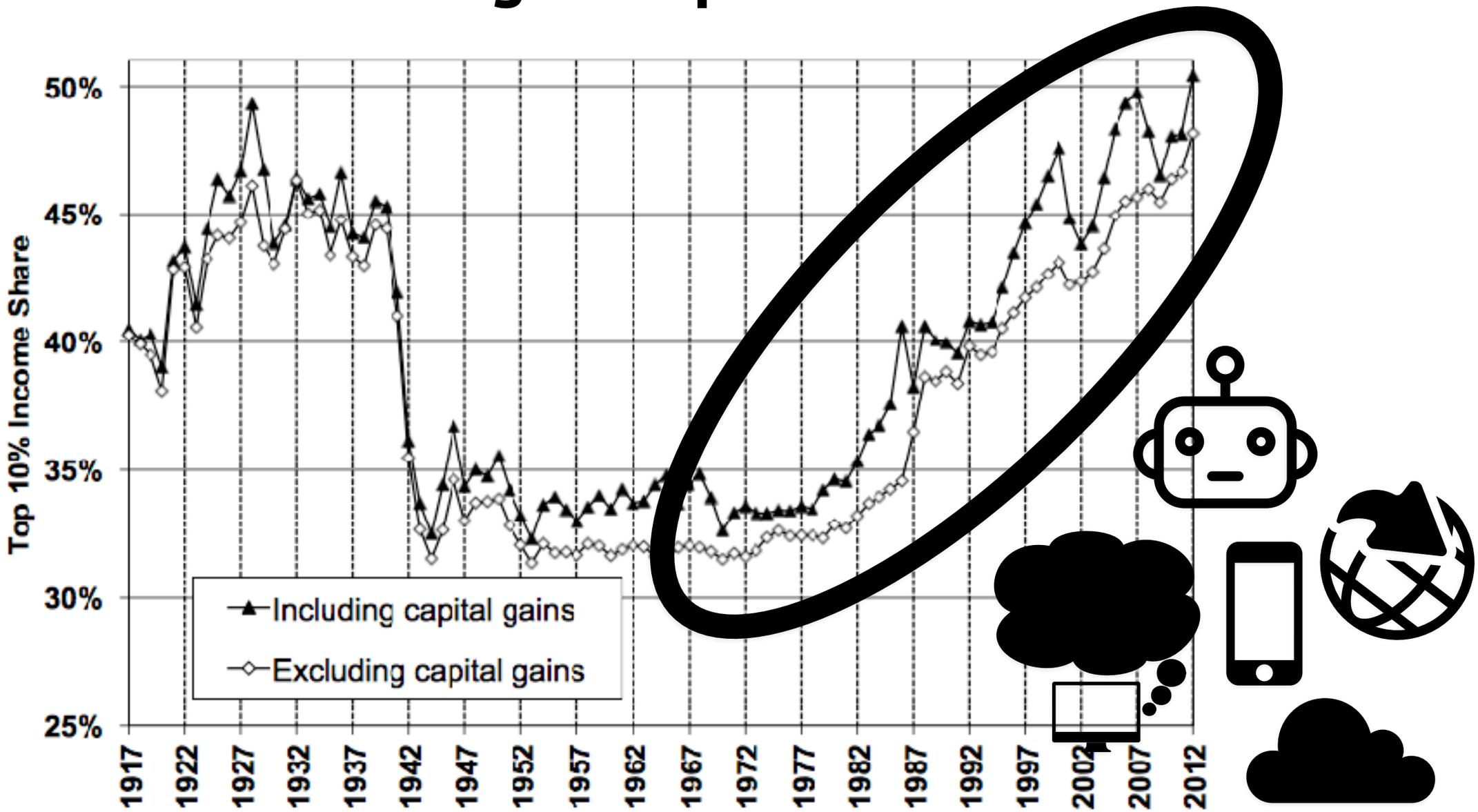
% of Income Going to Top Decline of Earners



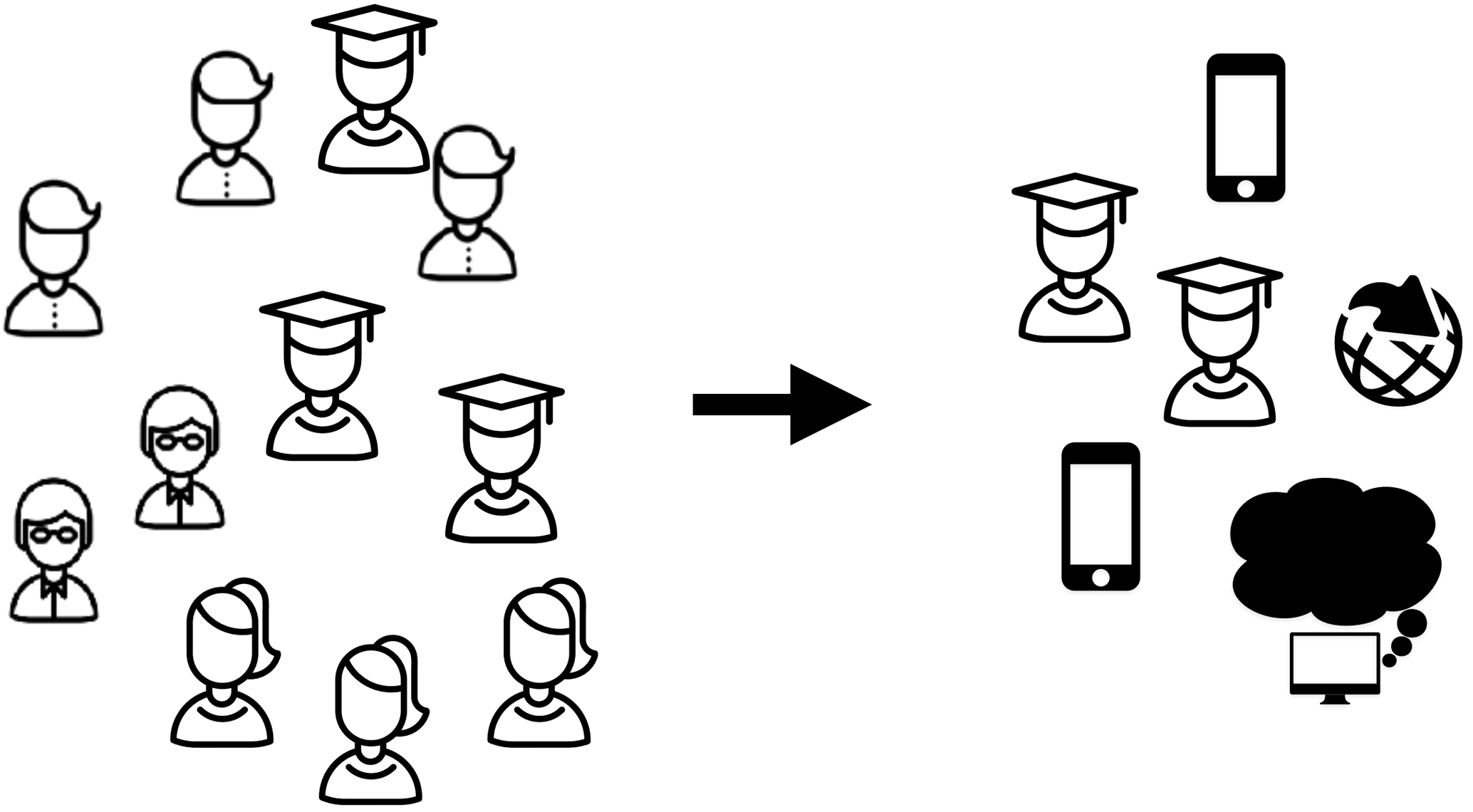
Source: Saez 2013

% of Income Going to Top Decline of Earners

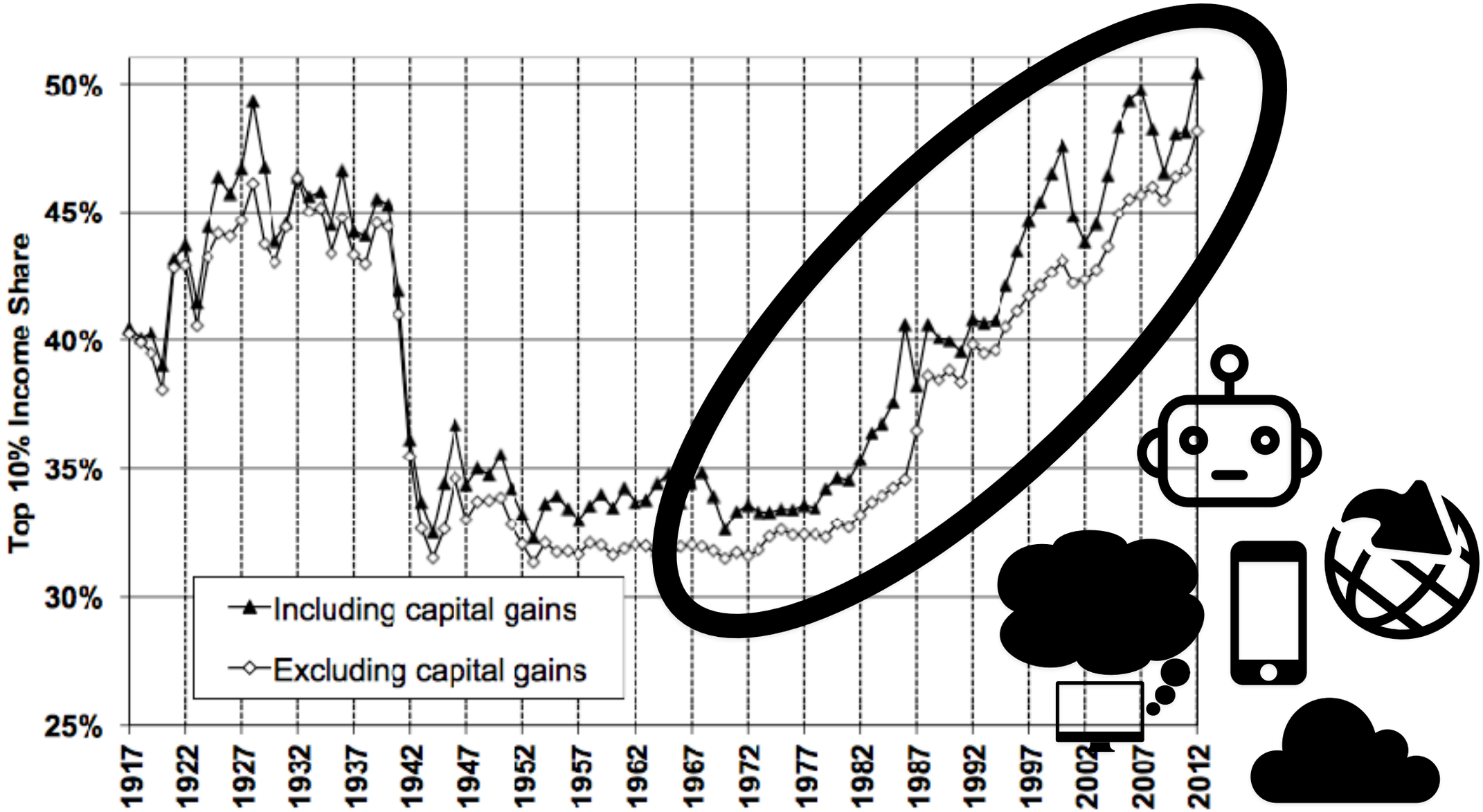


Computing technologies are (partially) at fault

Source: Saez 2013



This is a critical HCI problem!



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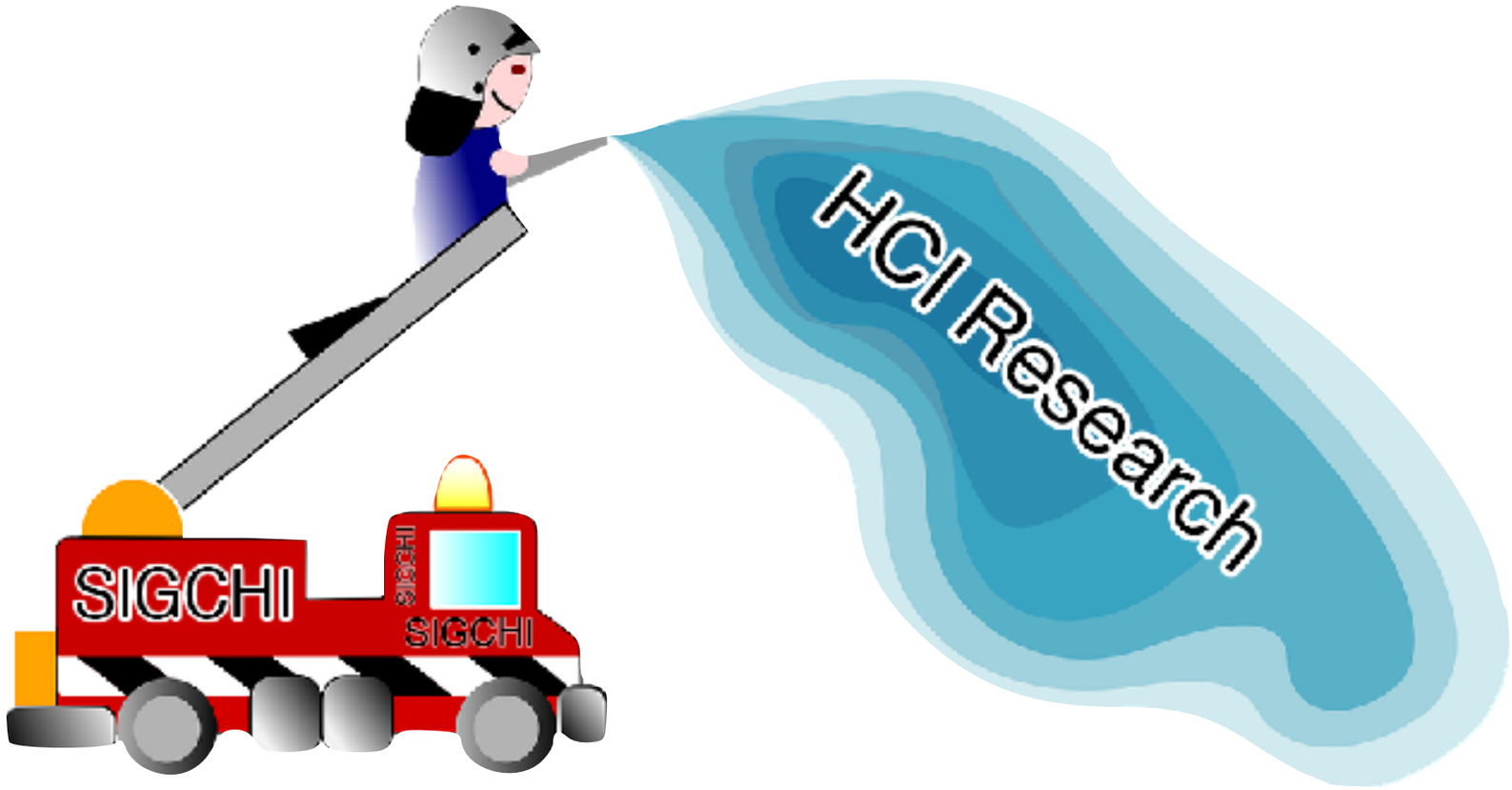
Computing-induced Income Inequality

http://gunshowcomic.com/648



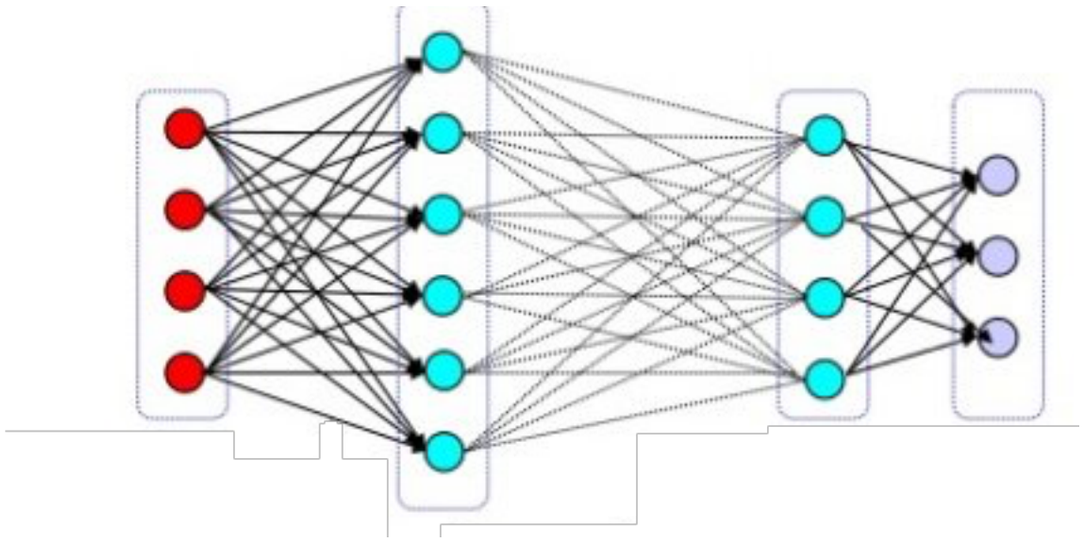
This will be hard:

* Must define new, tractable problems
* Must deal with highly complex social systems

Computing-induced Income Inequality

Intelligent
Technologies

Intelligent Technologies

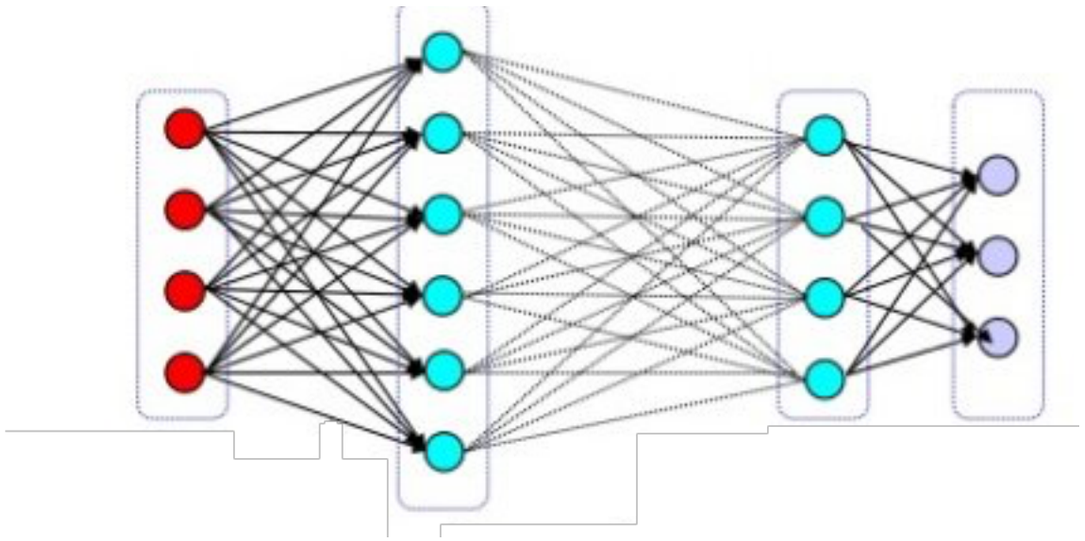


Advanced Algorithms

Human-generated Datasets

Technological Dividend

Intelligent Technologies



Advanced Algorithms

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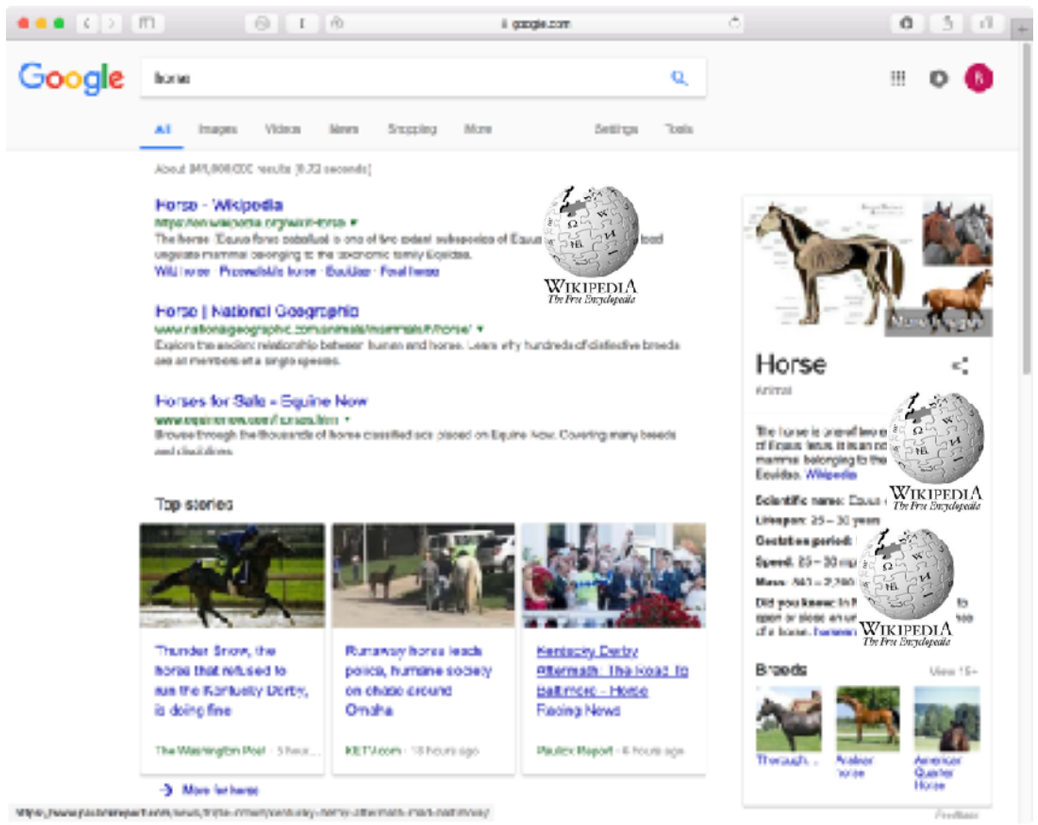

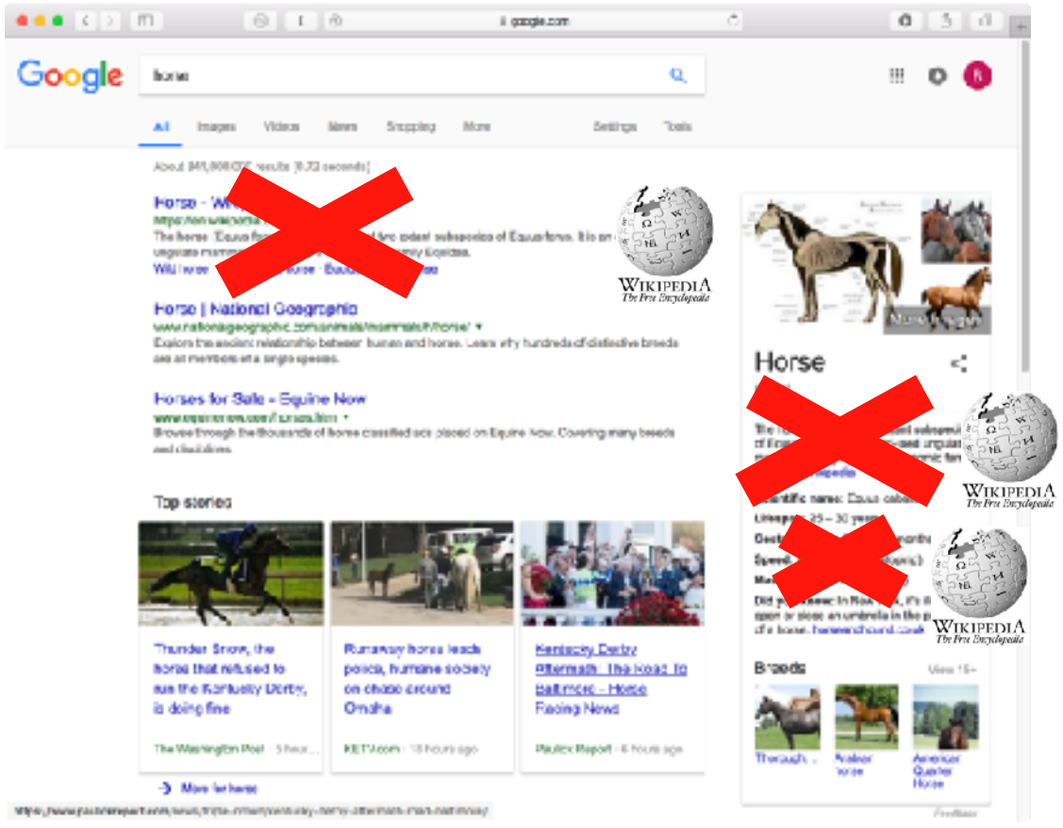

McMahon, C.[1], Johnson, I.[1], and Hecht, B. (2017) The Substantial Interdependence of Wikipedia and Google – A Case Study on the Relationship Between Peer Production Communities and Information Technologies. *Proceedings of AAAI ICWSM 2017.* [1]*Co-First Authors*

* Nominated for Best Paper Award

ICWSM-17
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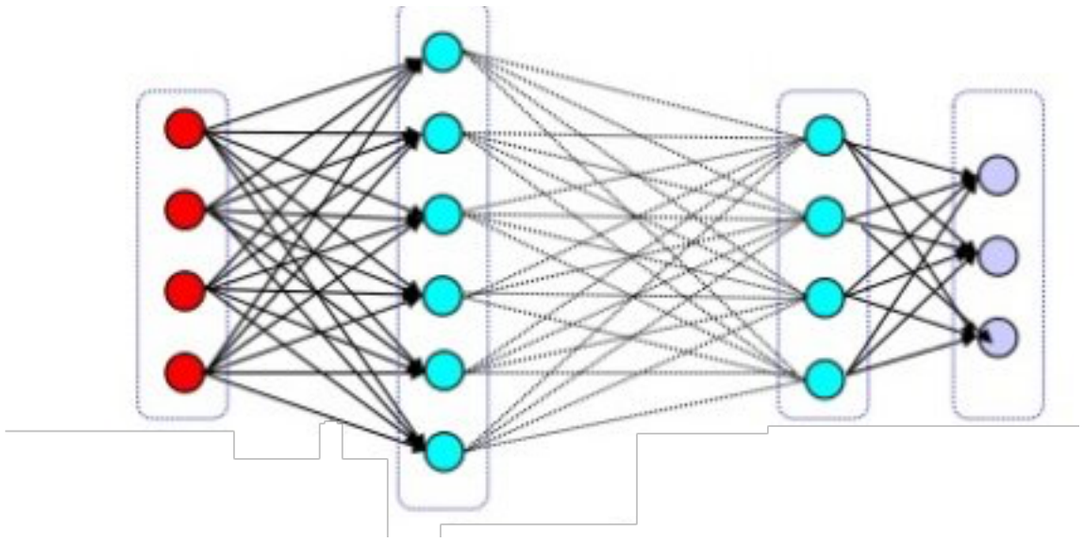
The 11th International Conference on Web and Social Media

Technological Dividend

Intelligent Technologies



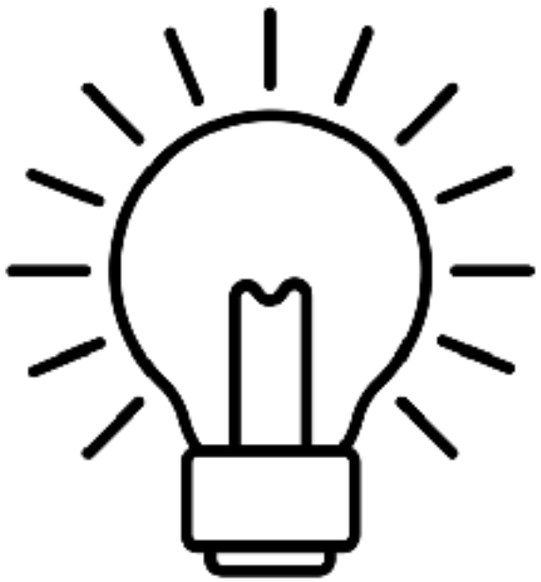
Advanced Algorithms

Human-generated Datasets

Possible Solution #1

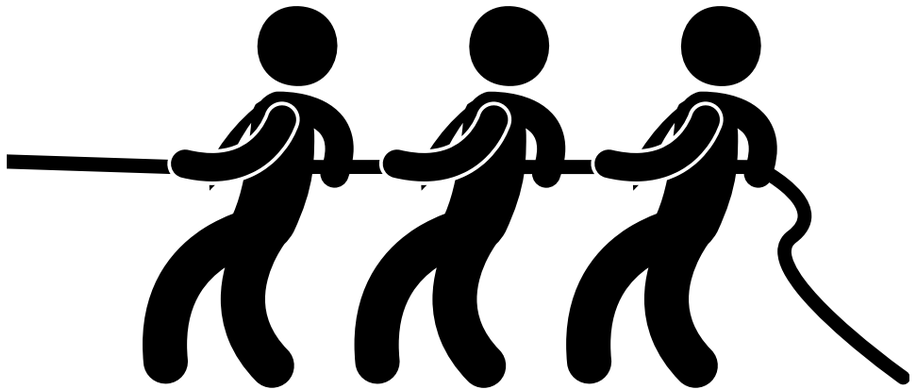
Problem: Computing-induced income inequality

- STEP 1 -



Make people **aware** of the **value** they bring to intelligent technologies.

- STEP 2 -

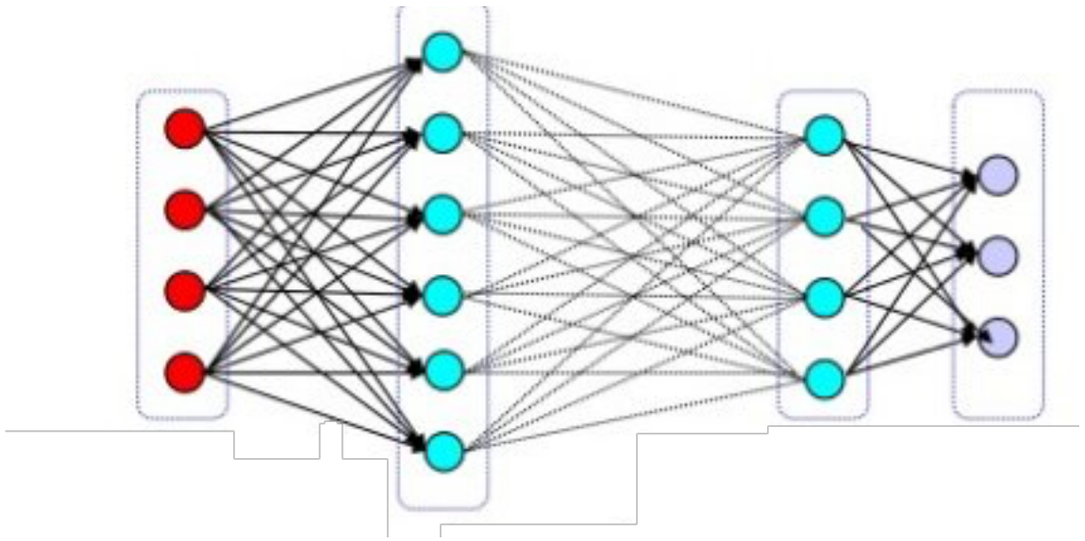


Build **tools** to enable **collection action** around that value.

Technological Dividend

Technological Dividend

Intelligent Technologies



Advanced Algorithms

Human-generated Datasets

Q1: What issues need to be addressed

- Computing-induced income inequality

- **Q2: How can we have a greater positive impact?**
  - Consider negative broader impacts
  - Build more systems
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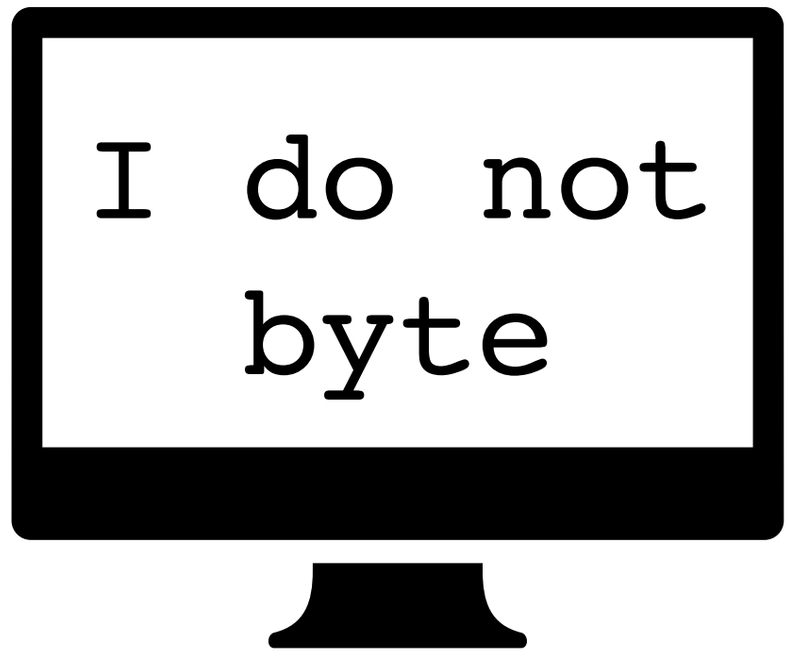
#1: Systems! Systems!

- In general, more systems → bigger impact
- Systems work can be harder…
- …but the pain is rewarded with gain



#2: Negative Broader Impacts

- Can **no longer** assume that our broader impacts are always positive.
- Need to **take this seriously** in our papers and grants

#2: Negative Broader Impacts

- Can **no longer** assume that our broader impacts are always positive.
- Need to **take this seriously** in our papers and grants.
- Same deal in our role as **reviewers**
  - Must be **fair** and **fact**-based

CHI 2017

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The Geography of Pokémon GO: Beneficial and Problematic Effects on Places and Movement

Ashley Colley[1*], Jacob Thebault-Spieker[2*], Allen Yilun Lin[3*], Donald Degraen[4], Benjamin Fischman[2], Jonna Häkkilä[1], Kate Kuehl[2], Valentina Nisi[5], Nuno Jardim Nunes[5], Nina Wenig[6], Dirk Wenig[6], Brent Hecht[2], Johannes Schöning[6**]**

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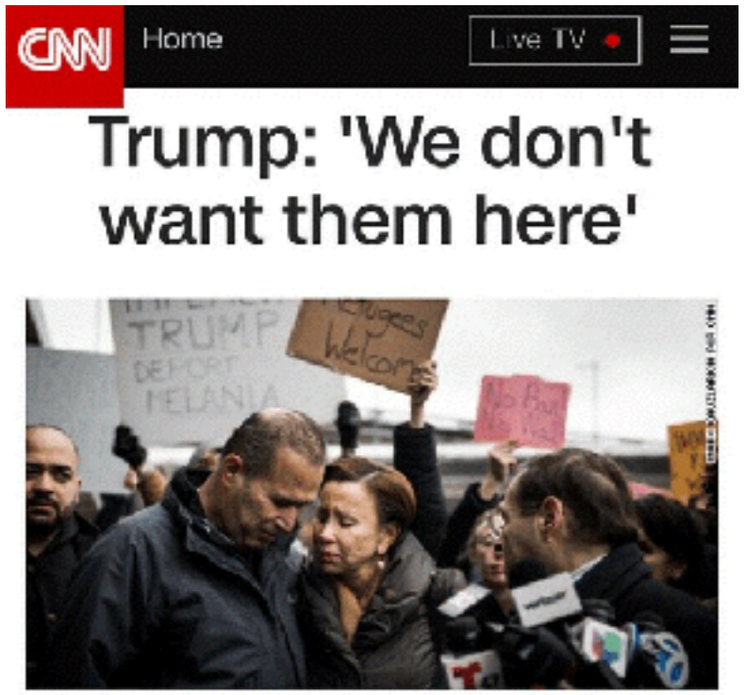

I love how misleading CNN is with their news headlines

Avoid the Circular Firing Squads

Single-blind is better than double-blind!

There should be a subcommittee on {X}!

Reviewing takes up too much time!

Off with R2's head!

I can't believe they forgot to cite my paper!

The Rest of the World
(seemingly, at least)

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The HCI Community

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