THE FUTURE OF WORK

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APPALING FACTS

The richest 1% of the population has 34% of the wealth, the richest 0.1% has 15%.

Top 10% of the population gets 48% of the income.

Mean income of the top 10% is ~$255,000; of the bottom 10% is ~$30,000

Income and wealth of the rich grow faster than work income

The economy is bifurcating; the middle class is shrinking

HOW DID IT HAPPEN?

The US used to be a farming economy, then a manufacturing economy, and now is a service economy

But we have a largely unskilled labor force

Very few have highly valued skills

Very few can acquire highly valued skills (good education is not accessible or affordable; best predictor is parent income)

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WHAT DOES COMPUTING HAVE TO DO WITH IT?

Computing skills are some of the highest valued and paid

The digital divide is widening

The digital economy can generate billions with a small but highly-skilled labor force

What are AI, robotics, and deep learning doing about it?

WHAT IS OUR RESPONSIBILITY?

We could go on having fun by discovering computational truths, principles, and tools

or

We could focus much more of our work toward addressing these issues

PATHS TO MEANINGFUL IMPACT

Training a more socially conscious generation of highly skilled high earning computing professionals

and

Choosing more socially conscious research foci

ANOTHER HYPOTHESIS:

Technologies aimed at enhancing (training, repairing, empowering) human abilities rather than replacing/ automating human abilities are more inclusive and result in more fair economic outcomes.

DATA:

Many more such technologies need to be funded and developed so the hypothesis can be tested

TECHNOLOGIES WORTH DEVELOPING

- Facilitate access to effective high-value skill training

- Improve human motivation to work, not get out of it

- Encourage empathy and socialization with other people

- Adaptively provide motivation for productive activities, not just fun (but useless) monetizable ones

➔ Because:

Access, drive, and effort, can't be outsourced or automated