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

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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?

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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

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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.
• 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