



The pause we need to review the paradigms of AI Development

Ing. Lope Hugo Barrero Solano, ScD.
Decano de Facultad

We all have learned about the great potential and risks of AI. Nobody can, however, predict with certainty, how the current pandemic will speed up, reduce or modify the development of AI, the use of all its potential or the magnification of all its risks.

-In a first simple view, one could say that we need more than ever the advance in technology so we can come up with faster solutions. Perhaps faster development of vaccines or other means of control for this and other pandemics to come. Perhaps, better means to implement rapidly all

kind of worldwide coordinated efforts in sectors such as health, transport, migration control and communications. Therefore, we can expect that several areas of science and technology, including of course AI, will grow at a faster rate, as it has been the case in other times when cultures, nations or the society, have been put under stress.

I think, however, that what the pandemic has mainly pointed out is the need to review how we live, how we make business and how vulnerable we are as human beings. It has point out weaknesses of our current way of making decisions as a global society and the great inequalities we continue having, in spite of all our development and knowledge.

-Therefore, one can also expect that the current pandemic will allow a pause to think about what we do with AI, how we do it and what the purpose of it is. This is perhaps the main message of what I want to say today.

Let's consider one person who has dedicated a good deal of his lifetime to develop AI algorithms, which has allowed herself become recognized, become a millionaire, or become an important influencer of people's lives. The pandemic has shown that it can be harsh on persons with specific risk factors, but also, that it can gravely affect with some degree of randomness anybody.

No matter if, it is a president, a sport man, a scientist, a worker, a company owner or an artist, there is a risk. This person understands that the consequences have been more devastating among folks with fewer resources; and perhaps feels privileged for this.

Is there any chance, this person feels also that more needs to be done for others?


Is there a chance that this person realizes that all that recognition, money or power, really does not matter, when there are great threats to humankind?

Is there a chance that this person realizes that AI, in a very different way of course, the same technology that has given this person recognition, money or power, can be a threat for himself, his family and humanity?

More importantly, is there a good chance that not just one person, but we all, as part of a global society, realize of this?

Just in case, I am not proposing that we stop AI developments or that it is even feasible to do it out of a sudden massive attack of consciousness. Perhaps, there will come a day that humans will need to make that kind of choices. I cannot say it.

What I am saying is that we need to take the time to pause and think of what we want to do with AI, and the pandemic offers us this possibility with a unique perspective.



I would like to take the opportunity then to reflect on three ideas that many of us use to decide on whether or not to develop new technologies, which can be analyzed in the context of AI:

-The first idea: Technology is neutral, what matters is what we do with it

-The second idea: If technology benefits overcome technology risks, then we can continue

-And the third idea, perhaps the most controversial: If we place limitations to the use AI, we need to balance off these limitations against the loss of competitiveness due to such limitations.

-To me, they sound fair at first. However, in our current situation, in a moment of pause, I am not sure I am OK with all of this. I can understand the idea of technology being neutral, but not as an excuse to avoid questions about the consequences of it, whether those consequences are intended or not. I will explain myself. I would not be OK with a researcher saying for example 'I solve a huge problem of our society, I did my part, now other people should do theirs and be concerned about other potential uses of the technology I created.'

I can also understand that every time we make a decision, every time we make choices, there are pros and cons, and we need to somehow make up a system to weight factors and decide. It looks like this:

-Scope of the benefits * number of people impacted positively > Scope of damage * number of people impacted negatively
If the benefits of use of a technology surpass the potential damages, we go ahead. Nevertheless, we all understand that there is so much uncertainty in this equation and that it depends on how we look at things and make the count. It may be that all becomes a matter of who presents the best arguments or who has the most economically powerful arguments.

-This connects with the third idea. It appears that our current world economic system is all about competition. The development of the vaccine for COVID 19 is the latest salient example of it. There is competition among persons, among companies, among universities, among nations; I think competition has been present throughout our history as humans as part of survival and as means to live "better" than others.

-Therefore, we would need to ask, how much we are willing to risk by using AI in order to be first in the competition for a new product, a new market or a new ranking.

I would say that it is not possible to make something significantly good for all of us with the current state of affairs, our current way of living and thinking. I think that a society that rewards highly single ideas that are capable of producing millions for a few, even if it produces benefits for many, will not really take us so far as society.

Please consider now the following: Some of the firms producing a great deal of the advances that make our lives "easier" using AI are the same making large amounts of money out of their inventions. Is this a contradiction or is it a necessary condition for breakthroughs to happen? Many people will say it is only fair that those helping a lot are paid in large amounts; but of course, we can open all sorts of debates about what it means to help a lot and whether the large amounts should be somehow limited. I wonder if this system we are in, which fundamentally rewards with millions the good ideas is all there is. I am not at all against paying well to smart people doing good things. However, is it possible that we manage, as a society, to reduce this economic incentive, even just a little, in favor of teaching people about the greatest reward of all, the satisfaction that we all can get by showing solidarity for our fellow citizens of the world?

-If we want to move ahead with this fundamental change, I see no other option but to strengthen and improve our ethics edu-





cation. I am not here talking necessarily about courses. I am talking here about education about fundamental values, that can be imprinted in our children since very early in life, and that are so fundamental that can be accepted by everybody. Education that rewards those that are willing to help for the sake of helping.

I share some of these thoughts with one of the most respected faculty members at Javeriana

-University, and he said, "this is all so idealistic". I could not help feeling frustration with this honest comment. Then suddenly I had a second idealistic thought: what if it is not idealistic, what is just a huge challenge.

--- And if it is a challenge, we may need to ask ourselves first:

-What is the current state of affairs in ethics education and what difference is it making in our lives? How the current pandemic can give us the little push that we need, to think more deeply and consciously about these issues?

I am not sure how effective we are being regarding ethics education as global society and at different levels of education. I can ask though, to you, and to myself, how good we are doing in our own schools in this front. It is a hard question to ask and to respond, but I will say for now, that perhaps one simple metric we can go about is how much effort, for example, in a school of engineering we dedicate to develop technology and comparatively how much effort we put into assessing or foreseeing its impacts? Is it equally likely that one of our faculty would lose a night of sleep thinking on how to make a more efficient algorithm than thinking on how his algorithm could be poorly used by others?

I think we all need to care, and the pandemic allow us some perspective and pause to ponder these delicate topics.

-To move forward, I think we need to start with further awareness. Awareness provides us with mechanism to push ourselves and to press policy makers. It appears judging by recent attempts to create laws in the European Union, for example, that a basic sense of awareness is already among us. However, this will not replace the fundamental effort to make a change in the hearts of the new generations. We do not want people pondering the effects of AI because they could get in jail, but because they want to do well. Ethics education will give us a chance that one day, decisions in private organizations, in academics and in governments will prioritize human dignity beyond the competitiveness among companies and among nations. I certainly do not see that happening anytime soon, but that does not mean we should not try. On the contrary, we should try harder. Thank you very much.



Pontificia Universidad
JAVERIANA
Bogotá

Facultad de Ingeniería



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