

Should we be afraid of artificial intelligence?

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It has been said that we are now in the midst of the Fourth Industrial Revolution. Like the previous ones, which included the invention of the steam engine, the mass adoption of electricity, and the use of technology to automate processes, disruption is expected in the way we live, work and play. This one, however, is happening at an unprecedented rate. In fact, we are already seeing its effects today, where once isolated machines and systems are now brought together, where they each communicate with one another to improve the way things are being done. With artificial intelligence's ability to learn things at a pace unimaginable to humans, and their potential to upend traditional industries, we should be afraid of artificial intelligence. Nevertheless, being afraid does not mean that we avoid artificial intelligence; it simply keeps afloat the constant need to be cautious and adaptable as we embrace it.

Firstly, it must be acknowledged that artificial intelligence was created to help us humans, and we should not be afraid of the new entrant to our way of life. From the very beginning of its invention the aim was to improve efficiency and our welfare, and this indeed has been achieved. To illustrate this, there is no better example than Uber, the ride-booking service that has become synonymous with the Fourth Industrial Revolution. The services tap on artificial intelligence to allow geographical navigation systems to interact with one another and with the central system, in order to allocate the nearest possible vehicle to customers. Not only has this brought about tremendous convenience for commuters, who no longer have to spend a long time hailing a cab in vain, it has also lowered the costs of the service providers. This is because when artificial intelligence allows vacant vehicles to be linked with willing passengers seamlessly, it maximises every available resource. By doing so, firms can channel profits into innovation and develop even better products and services for consumers. For instance, Uber has introduced UberEats, which allows consumers to have food delivered right to their doorstep, saving them much hassle and time. Uber is currently also working on a helicopter-hail service, a service which would never have been possible if not for the efficiency and productivity improvements which artificial intelligence has brought about, enabling firms to have a larger amount of profit available for further investments in innovation. Hence, artificial intelligence is meant to help, not harm us, and there is theoretically no reason to be afraid of this invention.

However, perhaps also due to this same reason, artificial intelligence has brought about several unintended consequences to society. One such adverse effect is the displacement of jobs. With its impressive ability to deliver results more efficiently, traditional business models are either being ditched or replaced. Automation through linked processes, demand-based production and cloud computing has made it more economically viable to adopt technology, resulting in firms deciding to replace people with technology. The NTUC Fairprice group in Singapore recently opened a Cheers convenience store which is fully automated. While it appears to be run in a simple way without visible robots serving the customers, behind every shelf is a complex network of sensors and algorithms. Through artificial intelligence, information is pooled together. Systems make a decision on their own regarding when stocks need to be replenished, and automatically place product orders when needed. The adoption of this system has eliminated the need for cashiers, store assistants and logistics managers, as all that is needed is for a delivery personnel to stock up the goods exactly how the systems have arranged for it to be. In addition to traditional business models being abandoned willingly by firms, artificial intelligence also has the potential to replace the traditional ones against the incumbent firms' own will. Airbnb, another company that uses artificial intelligence to recommend and allocate suitable resources – apartment units in this case – has also gained in popularity. It has however dented the profits of the traditional hotel industry, and the lowered demand for the latter has resulted in layoffs. Many jobs in the hotel industry have since been made redundant, and workers in other industries wonder when they will be next. From the finance and law industries, to the logistics and service sectors, artificial intelligence can, and has, resulted in the loss of jobs. Thus, we

should be concerned as our livelihood is at stake.]

We should also be afraid of artificial intelligence as we can lose control over what was meant to help us, introducing the risk of it turning against us. Sure enough, artificial intelligence is smart, but it has grown too smart for us humans to contain. Its ability to establish connections between once isolated machines, facilitate communication and create new plans have given rise to the possibility of these technologies one day bypassing us. Just recently, Facebook announced that it has scrapped an artificial intelligence project, after researchers discovered that the machines had developed their own language. For instance, one machine had communicated an instruction, "bring *the the the the the* 'item A'", which researchers discovered, after much analysis, that it was a command from one machine asking another machine to transport five units of 'item A'. In its public release, the team behind the project shared that they made a decision to abandon the project, because of such, and possibly more, language which even the creators cannot comprehend. These developments pose a serious threat. Unlike what is portrayed in sci-fi movies, it does not take an army of machines to plot a war against humans for us to be harmed. The threat looms nearer than we think; the mere loss of control over artificial intelligence can bring about catastrophic consequences. Firstly, if humans lose sovereignty over it, we can no longer tailor such technology to aid humans, eroding the very basis on which it was invented in the first place. Secondly, when we lose control over such technology that is ubiquitous in our everyday lives, we will face severe disruptions and possibly even death. The man-made WannaCry virus earlier this year was already able to bring down medical devices in Britain's National Health System hospitals. One can only imagine what a disruption, one incomprehensible to humans and brought about by the machines themselves, can do. The situation gets even darker when this effect is multiplied across all aspects of our lives. Given that artificial intelligence is getting increasingly prevalent in a multitude of essential services, from transport to security to logistics, the threat from artificial intelligence is a real and pressing concern. Therefore, we should be afraid of artificial intelligence, because of its ability to outsmart us and wrestle control away from humans.

Nevertheless, even as we should be afraid of artificial intelligence, we should not avoid it. On the contrary, because we should be afraid, all the more we should embrace it, and take greater control over them as individuals, instead of leaving them to fate, or to the hands of a few corporations or researchers. Furthermore, the feeling of fear can be a source of passion, propelling us forward in our drive to make use of it to improve our lives. In the past, humans had faced a multitude of challenges. From disruptions through the previous industrial revolutions, to catastrophes like war, natural disasters and disease outbreaks, there were many instances where we were afraid, but in each and every situation, we emerged from it stronger and more resilient than ever before. As artificial intelligence brings about another wave of fear, it is time we embrace the changes while taking active steps to improve ourselves. From reforms in education to governments' drive to create smart cities, we are well-placed to face the challenges ahead. There is no reason for fear to deter us from enjoying the fruits of change, as we can see from how we have changed since the agrarian times. After all, it is through fear and the innate desire to protect ourselves, that we evolve as a human race.

In conclusion, while we should not ignore the plethora of benefits AI offer brings to us, we should be afraid of artificial intelligence, given the many threats it poses to us. Therefore, we should use this very fear to adapt and grow. It is either we ride on the waves of change, or let the waves cascade over us.

Comments:

Junhao, a well-written essay! Your analysis of AI today is interesting and you showed depth in your writing. Good! For a wider scope, you could have considered what governments and scientists can do or have done to mitigate the employment problem brought about by AI. The conclusion is short.