How close are we to the A.I. singularity?

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Carlos Alves

While futurist and computer scientist Ray Kurzweil predicted 15 years ago that singularity will come around in 2045, others have speculated that the tipping point will occur way sooner.

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Opening the A.I. “Flood Gates”

Now that ChatGPT 4 is out, OpenAI's most advanced system, the hype has reached fever pitch, here in the latest and greatest of AI chatbots we finally have something that can surpass us, and yet humanity has welcomed these new AI overlords.
The problem is that very few scientists want to halt the advancement of artificial intelligence. The technology promises to transform too many fields, including science, medicine, and education. But, at the same time, many A.I. researchers are issuing dire warnings about its rise. “It’s almost like you’re deliberately inviting aliens from outer space to land on your planet, having no idea what they’re going to do when they get here, except that they’re going to take over the world,” stated by Stuart Russell, a computer scientist at the University of California, Berkeley, and the author of “Human Compatible”.
Disturbingly, some researchers frame the A.I. revolution as both unavoidable and capable of wrecking the world. Warnings are proliferating, but the A.I. march continues.So, how much can be done to avert the most extreme scenarios? If the singularity is possible, can we prevent it? Maybe not**,** A.I. is advancing quickly, and it

could soon begin improving more autonomously. Machine-learning researchers are already working on what they call meta-learning, in which A.I.s learn how to learn. Through a technology called neural-architecture search, algorithms are optimizing the structure of algorithms. Electrical engineers are using specialized A.I. chips to design the next generation of specialized A.I. chips. Last year, DeepMind unveiled AlphaCode, a system that learned to win coding competitions, and AlphaTensor, which learned to find faster algorithms crucial to machine learning.

So, they’re open, now what?

Let’s go over the possible symptoms and consequences of such an event;

When greater-than-human intelligence drives progress, that progress will be much more rapid. In fact, there seems no reason why progress itself would not involve the creation of still more intelligent entities on a still-shorter time scale.

The best analogy that I see is with the evolutionary past: Animals can adapt to problems and make inventions, but often no faster than natural selection can do its work. The world acts as its own simulator in the case of natural selection. We humans have the ability to internalize the world and conduct "what if's" in *our* heads; we can solve many problems thousands of times faster than natural selection. Now, by creating the means to execute those simulations at much higher speeds, we are entering a regime as radically different from our human past as we humans are from the lower animals.

From the human point of view this change will throw away of all the previous rules, perhaps in the blink of an eye, an exponential runaway beyond any hope of control. Developments that before were thought might only happen in "a million years" (if ever) will likely happen in the next century or even sooner.

As time passes, we should see more symptoms, like automation replacing higher and higher level jobs. Today we already have tools like symbolic math programs that release us from low-level drudgery, or putting it in another way, the work that is truly productive comes from the domain of a steadily smaller and more elite fraction of humanity. With Singularity around the corner, we will be seeing the predictions of true technological unemployment coming true.

Another symptom of progress toward the event is that ideas themselves should spread ever faster, and even the most radical ones will quickly become commonplace.

And as far as the singularity actual appearance goes, my thought is that since it involves an intellectual runaway, which will probably occur faster than any technical

revolution seen so far, I cannot predict what appearance it will take, but what I can say is that it will radically and unpredictably transform our reality.

Food for thought...

All of the above in itself is quite scary. And yet it may be that researchers' fear of superintelligence is surpassed only by their curiosity. Humanity's insatiable inquisitiveness has propelled science and its technological applications this far. It could be that we can stop the singularity but only at the cost of curtailing our curiosity.