

PITFALL OF ARTIFICIAL INTELLIGENCE

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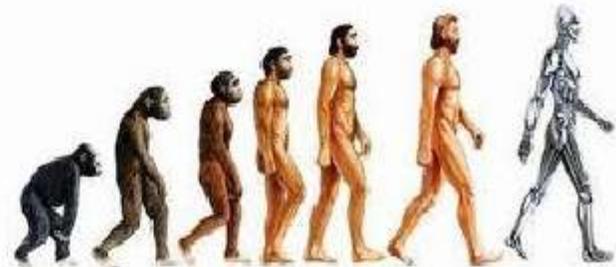
Abstract: Today we have started achieving things that were once far beyond the control of realm of humans with the help of Artificial Intelligence. Here we analyse about the Booby Trap posed by the Artificial Intelligence. Google Glasses, Nano batteries, Paperless papers, Unmanned Drones fill up today's news column. On contrary, the prominent minds of 21st century have started warning that the development of full artificial intelligence could spell the end of the human race. As worms have evolved into apes, and apes to man, the evolution of man to an Artificial Intelligence is just a natural processe. Certainly it would probably only be a matter of a few centuries before modern man destroys the earth, whereas an artificial intelligence may be able to survive for millennia. This paper aims to help raise awareness of the danger that computers pose. It might be possible to program a "Friendly" AI. While a Friendly AI would be very nice, it is probably just wishful thinking. Our awesome ability to develop computer hardware may have already pushed us over the line. It would seem to be extremely reckless to assume that we can never build an intelligent machine just because we cannot build it now.

I. INTRODUCTION

Computers were primarily invented for simplifying the mathematical calculations. With the invent of programming languages the era of computers started a new version. Computers not only simplified the mathematical equations but also opened the door of impossibilities and made humans to think impossible. After industrial revolution in Europe, the super powers started thinking about the new inventions as they believed that only these inventions can safeguard their country. During World War II, this research experiments were conducted in vigorous manner all over the world. It can be said that from this period artificial intelligence started nourishing either in constructive or destructive manner. Nazis invented new techniques to kill people and it ended up with the most dangerous disaster atom bomb. If World War II is destructive to be said, cold war which was following World War II between U.S and U.S.S.R was constructive. Eventually it landed the man in moon. Now, all these inventions were discovered to make the life of man simple, but overloading the artificial intelligence to machines might eventually sweep the man race from this world.

II. THE TECHNOLOGES THAT MAY DESTROY HUMANITY:

As worms have evolved into monkeys and monkeys to humans, now it may be a time for humans to evolve into machines, which may suppress or subdue humanity. Though the accelerating rate of our technological advancements, we are now seeing the rise of revolutionary new technologies. Even from an optimistic perspective, many potential threats can be foreseen. Here we discuss some of the technologies that may destroy humanity and in what way that may destroy humanity.



Nano Technology & 3d Printers: Nanotechnology is the science of manipulating matter on a molecular scale. Typical nanostructures are width of a strand of DNA (2 nanometers), 50 thousand times smaller than the width of a strand of hair. Nanotechnology will really start to make an impact on our world in the coming decades. There are arguments that even super humans could be developed with the help of this technology.

Just like the industrial revolution changed our world today, nanotechnology could change our world beyond comprehension. It will lead to massive improvements in renewable energy sources, putting an end to our dependence on coal and other fossils. It is predicted to cure all illness, even aging. Quantum computing will create computers that are billions of powerful than the computers what we have today. Literally everything what we see today could be transformed with the help of nano technology.

Risk:

Botulism-The human lethal dose of botulism is about 100 nanograms i.e., theoretically enough to kill every single human on earth could be packed into a single suitcase.



Nanobots- Artificial nanostructures, can be programmed to specifically target and kill humans. This small insect is about 200 microns. This nanotech-built antipersonnel weapon capable of seeking and injecting toxin into unprotected humans. It is estimated that human killing nanobots could be easily developed using advanced molecular 3-d Printers, which by 2040's will be owned by many production companies. Eventually these printers will be available in all homes .

3d printers are feared to have a deep toll on the economy of developed and rapidly developing countries like India and China. The following figure shows the 3d printed replica of miniature form of Efil Tower.

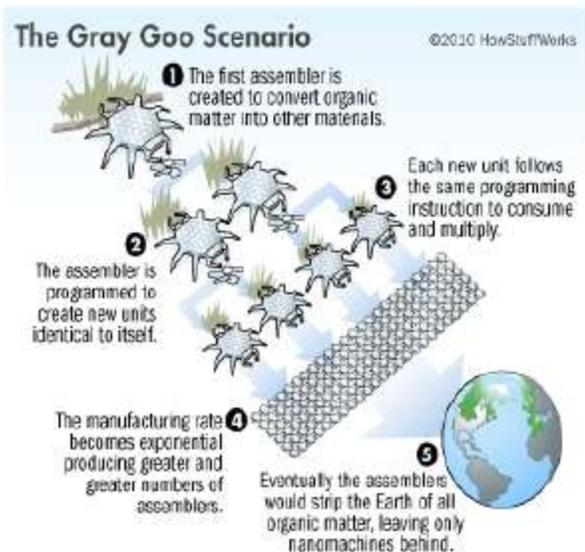


3d printer doesn't stop with the printing of non-living things, but scientists now have been able to print the living tissues. The following figure shows the 3d printed ear. Theoretically it is claimed to be a living cell.



With this technology it is proved that everything can be replicated ranging from cereals to computers, thus saturating the needs of our society. When 3d printers occupy the industrial sector, jobs of employees will be at stake. Growth must be a process and it must be sustainable development over a period of time. But 3d printers are expected to change the whole world scenario with the very rapid developing phase. Any saturated society is inclined to decline.

GrayGoo: An astonishing technology with the potential cure for cancer, is also believed to be the most lethal technology that could destroy humanity.



Tiny machines would begin to convert all organic matter into more assemblers (tiny machines are called as assemblers in general) consuming everything in the process. The earth would be reduced to a lifeless mass teeming with nanomachines.

In constructive manner also gray goo could be implemented. If even a small drop of anti-drug is injected into a cancer patient, it would replicate and replicate till it

dissolves the tumour cells. But what if, a lethal drug is injected?

Artificial General Intelligence & Big Data: Big data is an all-encompassing term for any collection of data sets so large and complex that it becomes difficult to process them using traditional data processing applications.

AGI is a conscious artificial construct that would be an intellectually independent thinker, as like humans. This one is the most dangerous threat that our humanity could encounter. When we develop AGI, that is significantly more intelligent than humans, our rate of evolution would increase. The level of resulting technological advance would be incomprehensible. What we hope though is that it will define the next stage of our evolution, we may transcend our biology, we can explore the universe, we can explore our existence, our creator, and we can become the creator, the Gods.

The exact development strategy of AGI is not yet clear. it could involve an artificial mind being activated, which would learn from scratch just as from childhood; it could be a supercomputer that is tweaked by adding hardware that would allow it to be conscious; or it could involve the integration of an already adult human mind. The reason of the threat is, AGI has limited capacity to think intellectually. For more relative example, think of terrorist groups for whom only religion matters all and they would see all other ideologies how good they are as a threat to their religion and have the tendency to subdue all forces. If an AGI was to be short-minded, it would be against all views which are not in line with its own, even if other opinions are rationally more likely to be correct. Big Data will allow this "weak" AI to potentially take control of all we know with the unleashing of a superbug, taking our cars, home appliances, power stations, communications, weapons plummeting humanity back into the dark ages, or killing us off altogether.

III. BIO TECHNOLOGY

The term biotechnology is used to define any technological application that uses biological systems, living organisms or derivatives thereof, to make or modify products or processes for specific use. It is expected that biotechnology would have a greater impact on health care. Genetic Therapy is currently used to cure diseases like cystic fibrosis, AIDS and Cancer. Research has been conducted all over the world in many leading centers to find the answer for immortality.



But the potential threat is, the seriousness of these risks is difficult to assess. With the help of such advanced technology, it is possible to create a disease. Engineered diseases could be airborne, contagious that would satisfy its creator's wishes. It might be targeted on the reproductive ability of humans making them infertile, making the humans blind, and killing certain race of people or as whole. Or, the existing bio-organisms could be made more contagious, increased survivability, drug resistance etc. The seriousness of this threat could be understood if you consider this, what if this technology was learned by terrorists, would they avoid those technologies or they will use that as weapons against humanity?

Climate Change: Another serious threat to humanity is this, Climate Change. For humanity to develop these perishing technologies, nature has to give time for us. It's right to say, we all are now living under the mercy of Mother Nature. With our increasing concerns to increase the productivity, super powers of this materialistic world are least bothered about the changes in our environment. The so-called pollutant emitting super powers have come to a conclusion in a recent conference that all the countries should limit the carbon emitting ratio by 2035. This stirred an argument in developing and under developed countries as they feel this draft is aimed at limiting their rapidly developing economy. These countries feel that, developed countries only so far emitted the carbon effluents and now limiting ban on the developing countries is un-fair. This leads to un-unified stand not allowing to reach any solid conclusion. But the emission of these carbon effluents is on hike from every year, worsening our environment. Any imbalance in our environment would lead to serious impact. Frequent earth quakes, tsunamis, volcanism have become part of news columns. The impact of climate changes are unpredictable, in most worse situation it may completely sweep our race, without even giving time for us to develop those perishing technologies.



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IV. CONCLUSION

The machines are slowly but surely getting smarter and pursuits in which humans remain champions are diminishing. Ethical outcomes from AI don't come out for free. Primarily what we have to do is consider the consequences of what we are preparing our societies for the change that may arise even before AI gets fully developed.

A self-realizable AI cannot be developed in a single day. It's not right to say simply, AI kills people, it's the people who control the AI orders AI to kill people. Simply to say, drones doesn't kill people, it's the people who control drones kill people. They must be held responsible. It's the people's attitude that has to be changed. Scientists must invent with an invention of serving the people better, making their life simple. Inventing a machine with the help of destroying humanity cannot be helped. Basic change in the attitude of Scientists is all required to keep them this risk at bay.

And, boosting over intelligence to a machine is always a threat as it could be easily misused. Fearing about AI or living with the naked threat of AI is not final solution. Humans must realize that machines are created to ease the lives of humans, not to dominate the lives of humans. They must believe that they could live in a machine-less world as our ancestors did. Behind every invention there must be a solid necessity. It's proven fact that without the help of humans, any technology can never ever grow. So it's all in the hands of people who are using it. AI is like a pet animal, growing that as a cat or lion, it's all in the hands of trainer. Once the harmful face of AI is out, it may not be possible to put back it in its box.

ACKNOWLEDGEMENT

The author would like to thank Dr.K.R.Santha,Head of the Department, Electrical and Electronics Department, Sri Venkateswara College of Engineering, for the valuable support and motivation for our work.