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Artificial Intelligence : Bright and Dark Side

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ABSTRACT

of science on humanity is well known. Science and its inventions has provided an unalloyed However, if we go little deeper, disturbing sign too appear. Artificial intelligence, one of the of science has undoubtedly provided us with the benefits that are beyond our imagination. would have thought of such comfort that we are experiencing is just because of AI. Technological in artificial intelligence are expected to spread in all areas and they have an impact on security, economics and governance. Artificial intelligence can impose great impact on our by improving decision-making abilities and improving human life. However, these comforts the most horrifying side of artificial intelligence that paves the way to our extinction! AI have a new identity to humanity but at the same time it alarms us that human race might face with that the dinosaurs faced. Evolution, the principle of life may saw a new species of machines over Earth if we persist on the support of AI.

INTRODUCTION

Human have the most powerful brain on this planet and all the wonders we see around us are of our brain only. The most fascinating and surprising element of it is that we are only using 5% of our brain, so think what it would be like when human start using 70 or 80% of the brain, answer is unknown.

When somebody asked, is it possible to see someone from thousands of kilometers away - the "no" a century ago, but we have now TV and Internet. It not surprising now to have such through Internet, one of the greatest wonder and invention of science that made us accessible to knowledge and verity.

Artificial intelligence is yet another forwarding step of science and technology. In today's is most mysterious and talked about human invention. It is now becoming an integral part of our life. Artificial intelligence or AI is an effort to stimulate human sense. In simple words, the ability to think and learn on an artificial level. Voice and face recognition, artificial assistance are some examples of AI. But on the broad label, the ability to think and react according to by the machine gives us a view of AI.

BRIGHT SIDE OF ARTIFICIAL INTELLIGENCE

These days we come across many machines that use AI, so the benefit we had achieved is able. In fact, it had made our life so easy and convenient that it cannot be image in the life these special machines. From automated cars to robot butlers, it's easy to imagine the ways AI has make our lives easier, counting some of the benefits we are enjoying:

Reduction

Artificial intelligence helped us in reducing the error and increased our chance of reaching with more precession. It demonstrates and shows best possible results using its complex and helping us to correct our approach well before to reach desired result. This is more like

AI doesn't just operate using a task-based system; it's smart enough to accurately interpret

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how data can be used. AI can be tailored to analyze data patterns in analytics to accurately predict your next best move. The accuracy of AI helps reduce errors while using current data to generate even more data.

Explorations

Robots with artificial intelligence are frequently used in many difficult explorations where human reaches very difficult. These machines can be used for exploring the deep ocean floor and hence overcome human limitations.

Steve Chien and Kiri Wagstaff of NASA's Jet Propulsion Laboratory have predicted that in the future, the behavior of space probes will be governed by AI rather than human prompts from earth.

The benefits of using AI to control space-exploring robots have been demonstrated by missions that are already underway. Both the Spirit and Opportunity rovers, which were launched back in 2003, had an AI driving system called Autonav that allowed them to explore the surface of Mars.

Daily Applications

We all have GPS enabled smartphones, smart camera, personal assistant like Google Assistant and Siri and no wonder we all are using them daily. Did you ever noticed your Google Map let you know when you will be reaching home, or your smart phone predicts in advance what you are going to type and correct your spelling error. Isn't that cool. Now what's interesting is that they all works on concept of artificial intelligence.

Medical Science

Artificial intelligence has laid down its step in medical field too. We usually come across news where robot had done a surgery. This is most important and in fact the best advantage of AI. Robotics is often used in helping mental health patient to come out of depression. A popular application of AI is radiosurgery which requires uttermost care. Hence, it had been useful in treatment which were considered difficult through human hands.

One of the most interesting ways to apply AI is helping those with disabilities and making their lives easier. For example, researchers have been using language software developed by IBM Watson, the company's AI supercomputer, to create Content Clarifier. It uses machine learning and language processing to help people with autism or dementia to interact better with language and the world. In practice, this looks like replacing figures of speech and metaphors with plainer language, as well as breaking up lengthy sentences. Simple, but effective, this is the kind of AI that could really change lives.

DARK SIDE OF ARTIFICIAL INTELLIGENCE

That said, with all these advantages this leaves us to the most horrifying and dark side of AI also. Some of the greatest thinkers of our time, including Stephen Hawking, Elon Musk and Bill Gates, aren't quite sure. Last year, Hawking went on record saying AI could be the last major event in our history - unless we learn to avoid the risks. But what exactly are those risks? And how can we avoid them? That's where things get a little hazy.

In past year, technologists at MIT published an article, "The Dark Secret at the Heart of AI," noting - regrettably - no one, even the best minds on the planet, really understands how artificial intelligence works. How can we ensure the technology never goes wrong if we don't understand how it goes at all? In truth, there are many well-founded fears surrounding AI, but there are also many potential promises.

Another, the most visible area where AI holds a lot of promise is cybersecurity. But this area also has some of the highest potential for fallout. This is because the same approach that is applied for cybersecurity is used by the dark side to bypass that security. In fact, sometimes it is easier for the hacker to break security using AI than it is AI to set up a good security screen.

As global experts continue to refine the technology behind artificial intelligence (AI), many also continue to debate whether that technology will help - or hurt - human society. Human have rule

the world not just because they were the quickest learner or intelligent among all other species but because they were also the smartest among others. On the same line, when Artificial Intelligence will become more smart and intelligent than humans, machines will become capable of outsmarting humans in every field. However, today AI is in its early stage. But at the pace we are progressing it will not be surprising to say that AI would surpass human intelligence by just the end of 21st century only.

According to the Hindu mythology, humans have taken birth just to do work and serve God but now humans start assigning a work to robots so in a sense it wouldn't be wrong in saying that we are approaching towards our end as we fail to do the job for which we were created.

Charles Darwin, the father of evolution stated, "only the fittest can survive". History of evolution said that only that species can survive who is the best adapted in the environment. Robots being more powerful, both physically and mentally than humans, can be one of the cause of extinction of human race. From the earliest time we have learnt from our mistakes and made us rule the earth just because of our brain and now we have given the brain to the Machines.

Some of the examples where AI shown its dark side were, Last year in May, a report highlighted that an AI-generated computer algorithm used by a US court for risk assessment was biased against black prisoners. The program asserted that blacks were twice as likely as whites to reoffend in the US. This conclusion was a result of the flawed or skewed train data that it was learning from. Predictive policing algorithms were spotted to be biased in results, due to the flawed or skewed historical crime data on which they were trained.

Yet another example, where a study analyzed the software trained on Google News which had become sexist due to the skewed train data it was learning from. This came to light when the software was asked to complete the statement, "Man is to computer programmer as woman is to X", and the software replied 'homemaker'.

There is no mathematical way to create fairness in machine learning. Experts believe that it comes no surprise that algorithms are picking up the opinions and mental biases of the humans who are training them.

Artificial intelligence has engulfed us these days – Google recently displayed AI making a phone call with a voice impossible to distinguish from a human voice, while fellow Alphabet firm DeepMind is not left behind and has made algorithms that can train themselves to play complex games. Scary isn't it!

There are yet many benefits of AI that might have made us more powerful, but we must not forget that it is only our brain which had made us so powerful and by giving this brain to the machine just to make our life easier can be the cause of our extensions.

CONCLUSION

While AI is being increasingly deployed wide across a variety of domains, from personal digital assistants, email filtering, fraud prevention, voice and facial recognition and content classification to generating news and offering insights into how data centers can save energy, but like every coin has two sides, AI also has good and the evil side if left attended with closed eyes.

In the near term, the goal of keeping AI's impact on society beneficial motivates research in many areas, from economics and law to technical topics such as verification, validity, security and control. Whereas it may be little more than a small nuisance if your laptop crashes or gets hacked, it becomes more important that an AI system does what you want it to do if it controls your car, your airplane, your pacemaker, your automated trading system or your power grid. Another short-term challenge is preventing a devastating arms race in lethal autonomous weapons.

In the long term, an important question is what will happen if the urge for strong AI succeeds and an AI system becomes better than humans. As pointed out by I.J. Good in 1965, designing smarter AI systems is itself a cognitive task. Such a system could potentially undergo recursive self-improvement,

triggering an intelligence explosion leaving human intellect far behind. By inventing revolutionary new technologies, such a superintelligence might help us eradicate war, disease, and poverty, and so the creation of strong AI might be the biggest event in human history. Some experts have expressed concern, though, that it might also be the last, unless we learn to align the goals of the AI with ours before it becomes super intelligent.

There are some more question whether strong AI will ever be achieved, and others who insist that the creation of super intelligent AI is guaranteed to be beneficial. We recognize both possibilities, but also recognize the potential for an artificial intelligence system to intentionally or unintentionally cause great harm. We believe research today will help us better prepare for and prevent such potentially negative consequences in the future, thus enjoying the benefits of AI while avoiding pitfalls.

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