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Kaleidoscope

October 2018 edition

THEME:

EVOLUTION OF ARTIFICIAL INTELLIGENCE

THE RISE OF AI: The emergence of Artificial intelligence and Robots in Industries..

In recent years, we have been continuously getting exposed to increasing number of headlines about the possibility of machines becoming more intelligent than human beings, and taking control over the globe from us entirely. These predictions which may or may not come true are the result of significant advancement in the computer science field called the artificial intelligence (AI).

So what exactly is artificial intelligence?

Artificial intelligence is a science of creating intelligent machines that could work, think and react accordingly like humans. The concept of AI is borne out of the desire to replicate human brain and eventually actions thus leading to less need for manpower.

AI has been around us for decades now but a convergence of big data, increased computing capabilities, improved hardware designs and the user demand has certainly levitated its growth. The very first AI program was written in 1951, that was coded to play checkers and chess, and now the fields in which AI is implemented are automation, medical diagnosis, electronic trading, remote control and remote sensing. All of these consist of machine learning algorithms that have facilitated them to react and respond in real time.

Artificial intelligence has proved itself a major game changer particularly in sectors such as manufacturing, logistics and healthcare with the implementation of AI robots. These robots are currently taking over almost every collaborative workflow, and are learning skills and techniques that have increased the productivity and retention rates. For E.g. Robots working in the manufacturing industries have eliminated a number of jobs for their human competitors where much of



the physical work is performed by them, while human workers are designated to higher

level jobs such as guiding,

monitoring and assisting robots. Robotics together with AI has started its march on labour and is creating more sophisticated and specialized machines compared to its first generation.

Nowadays, Humanoid robots are at the rise that has become one of the smallest service providing robots in the present market and are expected to have the greatest potential to become the industrial tool of the future.

The US along with Canada, Japan, South Korea and the UK currently leads the robot technology and robot adoption. A US based company Software Robotics has created human-looking robots to be used as medical assistants and teaching aids. These humanoid robots are doing extremely well in the medical industry, especially as companion robots. Many big companies are spending money on humanoid robotic technology to fill engineering and aircraft manufacturing jobs. Their view is towards removing humans from laborious and dangerous tasks so that they can concentrate on higher valued jobs.

All in all, the growth of AI and robots around the world is as staggering as it is promising. The basic idea behind creating AI was to make our lives easier, which has definitely proven itself true. While a lot of people fear about AI and robots taking the place designated to humans as tradition and lessening the need for manpower, it should be also observed that AI will be giving us so much in the terms of comfort and will create higher valued jobs in various sectors, which also makes us wonder what's next?

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IT Kaleidoscope.

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FUN FACTS:

ROBOTS, MOVIES AND THE RED CARPET: "You want an autograph? How about a digital one?"

Tech giants have given their AI robots a voice of woman. Alexa, Cortana are some examples. Well, this is because it is scientifically proven that the voice of women is more powerful to hear.



Alexa from amazon

Have you ever dreamed about living with robots? Don't worry, Sofia, the first AI robot citizen of the world (developed by Hong Kong based company Hanson Robotics) will not let you down.

Sophia is not a conventional robot. She has been modelled after Audrey Hepburn.



Sofia with the face of Audrey Hepburn

There are many AI pets which will be commercially used in 2025. So the next time you feel irritated about cleaning stuff and feeding your pet just wait for 7 years from now.



An AI pet dog.

From Rajinikanth's 'Robot' to Arnold Schwarzenegger 'Terminator Salvation' franchise, we have always loved and adored a futuristic world where humans can enact the role of the creator, where we - the common folk, have robots to cater to our every whim.

In fact throughout history and popular culture, the part that robots impersonate in art, literature and the big screen have proved to be a direct reflection of the social, cultural and technological standards of people whilst pointing to the eternal struggle between man and machine.

But the idea of AI and Humanoids in cinema isn't new. It had had decades to simmer and what we see now is the finished, polished idea. In the silent era, robots were depicted as an evil force, a science experiment gone astray with their sole purpose being the complete annihilation of the human race and their dethroning. Some cinematic works like Metropolis(1927), The Golem(1920), Flash Gordon(1936),etc. seemed like they were inspired by the dark side of industrial revolution - replacing human labour with automation. The "good robots" made their first debut in the genre of animation with 'Astro Boy' that was remade in 2009 with better cinematography and effects. Since then movies like Big Hero 6(2014), Jason and the Argonauts(1963) etc. further contributed to the theory that anything or anyone capable of thinking is also capable of having emotions and that robots of the future might become a sentient species who may work for the greater good of the human race just like the humanoid in the Sci-Fi 'The Day The Earth Stood Still' (1981) who had come to earth for the sole purpose of warning humans against their self-destructive nature.

Soon after 'Star Trek' and 'Star Wars came into being resulting into a worldwide franchise. Taking a leap in time and considering cinema of the 21st century, we see robots being an integral part of the sci-fi genre. There are movies like I, robot (2004)- starring Will Smith a technophobic cop investigating a crime that may have been done by a robot; Terminator Franchise - focusing on the ever raging battle for survival between the almost-extinct human race and world spanning AI 'Skynet'; Transformers - revolving around Autobots and Decepticons, two intergalactic races of robots who crash land on earth bringing a decade old war to earth and Indian sci-fi 'Enthiran' (2010) starring Rajinikanth as Dr. Vasi who builds Chitti a robot to protect mankind that goes rogue after he develops emotions.

In many ways, through sci-fi producers, directors and writers have tried to convey the ever prevalent fear of mankind — creator being replaced by creation. Even today, humans are obsessed with artificial intelligence and the idea of creating a being far more advanced than homo sapiens. But, it's about time we question ourselves - how far are we taking our obsession with AI? And where does it end? Are we obsessed with robots and humanoids because humans today lack social connections and sub-consciously harbour the need to build an artificial species to fill that vacuum?

Shouldn't we be focusing more on technologies that help heal our damaged planet? The portrayal of robots today and over the ages has proved that the future maybe an apocalyptic one or it could be a place where both species co-exist. It could also prove to be a place where one is the slave of the other. But the question is who would be the master and who will be the slave?

