MORDEN UNIVERSE OF ARTIFICIAL INTELLIGENCE

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Origin of AI

[1] The Turing test is a test of a machine's ability to exhibit intelligent behaviour. The test was introduced by ALAN TURING in his 1950 paper Computing Machinery and Intelligence. The original question behind this test was "Can machines think? ".

What is Artificial Intelligence?

[2] It is the science and engineering of making intelligent machines, especially intelligent computer programs. It is related to the similar task of using computers to understand human intelligence, but AI does not have to confine itself to methods that are biologically observable.

AI researchers are trying to create a computer which thinks.

[3] Artificial intelligence (AI) is defined as intelligence exhibited by an artificial entity to solve complex problems and such a system is generally assumed to be a computer or machine.

Artificial Intelligence is an integration of computer science and physiology Intelligence in simple language is the computational part of the ability to achieve goals in the world.

History of AI

[3] The actual history is rather messy, but it tends to work out as follows. In the 1950s, a visionary mathematician named Norbert Wiener was testing a version of the Turing machine with a chess program.

The history of artificial intelligence is quite messy, but its idea was started by Alan Turing. He thought "that what if computers could think and could figure out next step in a problem?".

His theory was that if a human can't differentiate if he/she is talking to a human or a computer. That test is called Turing's test. A software is called intelligent agent if it passes the test.

AI was born when John McCarthy termed it in 1956.

[4] During World War 2 Alan Turing helped in breaking German Enigma machine by worked at Bletchley Park.

Newell and Simon invented the idea of solving logical problems through programming codes in 1957, who they named as GPS.

John McCarthy invented a programming Language called LISP in 1958.

In most recent decade AI is advanced in:- machine learning, artificial life, planning, computer version, playing games,

Growth of AI

[5] There are mainly two themes in growth of AI.

Firstly, from the invention of spinning jenny to steam engine to electricity and then to computer chips. The key feature of economic growth is the process in development of machine production.

Secondly, the advancement in AI may be controlled by Baumol's "cost disease". He observed that the growth of AI was happening rapidly and even today, the shares of GDP decline while those sectors with relatively slow production.

[6] The important task in today's time is to make a sustainable reproduction of the capitalist economy. But in today's time of Great Recession the economy is always fundamentally instability. [7] The combination of state planning and a free market is the only way out of this deadlock. Due to lack of computer capabilities the planning was impossible to organize. But in today's world with sharp computer performance it is possible.

AI in Healthcare Appliances

[8] There are two subtypes in AI in medicine :- Virtual and Physical

The virtual part covers all the digital works such as electronic health record system, managing medical records.

The physical part covers with assisting robots in surgeries, elderly care and intelligent prostheses for handicapped people.

[9] Doing computative task such as X-Rays, CT scans, Analysing Test and data entry can be done by robots more accurately and faster. Cardiology and Radiology are two fields where the amount of data to examine is too much and very much intense. In future, only in complicated cases only human supervision is required in these two fields.

In recent progress of AI in medicine it helps in following procedures:-

- Cardiology -Atrial Fibrillation
            -Cardiovascular Risk
- 2) Pulmonary Medicine
- 3) Endocrinology
- 4) Nephrology
- 5) Gastroenterology
- 6) Neurology -Epilepsy
   -Tremor Assessment

Conclusion

[10] All the progress of AI happened is great but it will not replace the doctors in anytime soon.

AI in Manufacturing

[11] AI is a universal technology which is present in all sectors including manufacturing and production.

In this new era in advancement of AI intelligent manufacturing is done by the companies. In this intelligent manufacturing all production, management, integration, testing, system engineering technology and product related technology is integrated with the whole system.

The optimization of different aspect of manufacturing includes 3 element and 5 flows are all programmed by AI for best cost-efficiency, high quality and userfriendly equipment.

Elements:- organization, management and equipment and technology

Flows:- information, logistics, capital, knowledge and service

[12] There are many advantages of AI in Manufacturing

1. Quality inspection:- AI can easily do many inspection task in less time, high efficiency and more accurately from a human.

2. Advanced robotics:- to use AI in manufacturing it must be hand-build to perform a specific task but once after making 1 robot we can mass produce it then that task can be done in less time with almost zero effort.

3. Transportation:- In today's world automatic driving cars are already been made so it can help a manufacturer to reduce labour cost and it will reduce the chances of accidents.

AI in Security and SURVEILLANCE

1) Cyber Crime

[13]AI helps a company to be safe from online fraud by using neural network which helps in detection of spam, computer worms, malware classification. In anti-virus technology different techniques of AI is used such as Data mining and AISs

2) Troll bot detection and blocking

[14] In a research paper it is estimated that there are around 9%-15% of accounts on twitter are bots which are increasing from time to time. Botmeter API is a machine learning models which offers an AI driven approach which can detect that a account is a bots or a person. If it finds a bot account then it will automatically remove it from the platform.

AI in Education

[15] Mainly the work of AI is heavily associated with computer but as we read more and more articles, particularly in sector of education it is defined in two parts. The two parts are a field and a theory. In the field of study, AI is defined as the study area of computer science which focus on solving different cognitive problem. In the field of theory, AI solves theoretical framework with the guidance of CS and the help of humans.

In the new era machine learning and AI are widely applied in smart phones, whose target is to improve the quality of computers and open new possibilities for the new generation such as face recognition, speech learning, language translation and VR.

Let's talk about virtual reality (VR), it connects every student around the world with the help of AI, beyond the learning space. It also helps in online learning as it, turn instructor's speech into text know as transcription.

Due to the advancement in AI burden on instructor is becoming less as AI can revaluate papers, assignments, essay and also take attendance of how many students are present in class and how many of that are actually paying attention. Due to AI the instructors can focus on more important things such as student performance. AI can better analysis student data which would help the instructors to how to help each student in different ways and also with the help of AI the system can prevent the students from cheating and doing plagiarism in their homework, test and exams.

Advantages

[16]1) Due to AI a student can learn anything, anywhere and at on any time on this planet.

2)A person can find hundred of this online but because of AI that person can also find and learn topics related to that product he/she initially searched for.

Disadvantages

[17]1) Due to weather there may be network issue

2)Students can easily find their homework answer on the web

3)Rural areas does not have net connections.

Advantages of AI

[18]AI helps in almost every aspect of the work as it is cost effective, reliability and permanency. It is problem solving speed is also good. It can be used in many diverse field such as manufacturing, medicine, education, engineering and also be used in decision making. As its one of the most useful application is search engines. AI also prevents from knowledge from being lost. It can also develop learning capability that is learning from real world failure and success which is know as "reinforcement learning" which would give people advantage on what to when a situation is presented in front of them.

Now days AI is also used in transportation system, and many specific research have been provided that it is useful in transportation. Currently AI is being used in predicting traffic condition, reporting traffic accidents, it also used in traffic lights and sensor. AI can also be used in security breaches, and also in management and development of automatic response and control panels.

[19] Its major advantage is that it works on a program code rather than emotion so almost every time it gives prefect and precise answer to every question every asked. Due to AI spreading of information is so much easier and it give an answer to a question whenever we want to.

[20]AI helps a company to be safe from online fraud by using neural network which helps in detection of spam, computer worms, malware classification. In anti-virus technology different techniques of AI is used such as Data mining and AISs

[21] It also in medical field by doing computative task such as X-Rays, CT scans, Analysing Test and data entry can be done by robots more accurately and faster. Cardiology and Radiology are two fields where the amount of data to examine is too much and very much intense. In future, only in complicated cases only human supervision would be required.

[22] Its overall advantages are work done in a short amount of time, it has more efficiency, can do various function at the same time and its success ratio is high

[17] Some more uses of AI :-
- It can do difficult work in short amount of time
- It can do various task at the same time
- It requires less space
- It can discover unexplored things, i.e. outer space

Disadvantages of AI

[18] However AI also has some disadvantages as it is such a broad network an Sd everyone has access to most of the things. As it was also mentioned by Van Zuylen in his article that he mentioned AI as a black box and it's merely an attempt between input and output to establish a relationship. AI has advanced in automation but nevertheless it is no exception, with pace we are going now in future all vehicles will be automatic and if an automatic vehicle is involved in a accident then who would be held responsible for that crash?

[19] For most of the time it can't explain the logic and reasoning used to make a decision. If it does some malfunction due to a virus or anything else we would not notice it until some major blowback hap pens. It can be used for fraud and cybercrime.

[22] Because of AI many things are affected some in good way but some in bad way such as due to AI human jobs are affected, person dependency on technology is increased, as the generation moves on it has answer on their fingertipes and they become lazy.AI is a genetic algorithm, ant colony optimization and they never guaranty to reach the optimal solution. It also has the inability to do quickly sensitivity analysis and it's hard to find different methods for same problem in calculus.

[17] To increase the development of AI it needs tons of resources as many of the equipment are expensive. It cannot create bond with other machines as humans so it has poor team management. It can only do task which they are designed to do if there is slite change in task we have to code it again.

Conclusion

After reading many reports and research about artificial intelligence, in my opinion it's for sure that AI will be the future of upcoming generation. Now day AI is present in most of the upcoming and advance fields. AI is able to some pretty extraordinary things now days only so in future AI would be able to almost anything with little bit to human supervision. It's not that far away from now that AI will be able to make new and better version of themselves, so if we continue at this pace there will be only two outcome as I see. 1) AI will advance in a limited rate and it will help humanity in a good way 2) If AI advance at a much faster at first it will help humanity but as the time passes out AI will develop it's brain in such a manner that it will think about itself first which might not be good for humanity.

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