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Artificial Intelligence

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ABSTRACT

Artificial intelligence (AI) is the cap potential of a laptop or a robot controlled through manner of approach of a laptop to do responsibilities which may be commonly finished through manner of approach of humans because of the reality they require human intelligence and discernment. It is an intelligence which is shown by machines same as intelligence shown by human to perform the specific task which needs critical thinking. In this machine mimic cognitive functions perform by human mind in his/her daily tasks. Artificial intelligence done by many multinational companies like google, Netflix etc. Even it is used in self driving cars as demonstrated by Tesla. As a discipline of academicit is found in 1956.

Keywords: *Introduction, Reasoning, perception, learning, planning, Limitations, Conclusion.*

1. INTRODUCTION

1.1 Goals of AI

- In early times development of artificial intelligence takes in order to develop skills like reasoning and solving a problem.
- Due to emergence of artificial intelligence representation of knowledge became quite easy which includes presentation of knowledge which is understandable by machine or computer.
- The main aim of developing artificial intelligence is to developed such type of machines which can learn on their own .Thereis no requirement of feeding them data regularly.
- Artificial intelligence helps in developing the algorithm which actuates on its own according to input received from sensors .
- The goal of Artificial intelligence is to automate the robots to such level that they can perform such type of work which needs critical thinking.

1.2 Advantages of Artificial Intelligence

- Errors which are done by human being reduced to great extent which ultimately leads to greater efficiency.
- Impossible tasks can perform by these intelligent artificial beings which is humanly not possible like lifting heavy machinery etc.
- Now a days devices like amazon alexa build on the concept of artificial intelligence which helps us to access our device without touching it.
- Artificial intelligence even used in medical field in order to treat tumor patients with the help of radio surgery method . Artificial intelligence has numerous advantages from productivity to accuracy and many a lots.

1.3 Disadvantages of Artificial Intelligence

- Reach of artificial intelligence only limited to bigger organizations only because they can only have high-tech machines in order to implement the features of artificial intelligence.
- Yes, in terms of productivity robots can easily outperform the human but when it come to take decisions what is wrong or right robots can't take these decisions.
- Creativity will reduce to great extent.
- It might lead to increase in unemployment in the country which can leads to opposition of artificial intelligence by trade unions.

2. IDENTIFY, RESEARCH AND COLLECT IDEA

2.1 Applications of Artificial Intelligence

2.1.1 Healthcare: Artificial intelligence helps the faster diagnosis of patients which helps the patients to get the required helped

on time .

2.1.2 Gaming: Artificial intelligence can be useful in designing strategic games in which Ai bot can be programmed to take intelligent decisionsaccording to situation against actual player .some games which use artificial intelligence includes pubg, chess etc.

2.1.3 Marketing: Artificial intelligence have huge scope in advertisement marketing in which system can show the exact ads to needy ones according tobehavioral patterns and preferences.

2.1.4 Automobiles: In the field automobiles application of artificial intelligence includes self driving cars .It can directs the vehicle's camera ,gps ,radar tofunction automatically according to the situation .

2.1.5 Agriculture: AI can be very useful in agriculture sector .it can automatically detects whenever there is deficiency of water. It can automatically actuatethe pump to provide water to the plants according to requirement sensed by sensors present in the field.

Types of artificial intelligence

A. According to Capabilities

- Narrow AI

It cannot perform the task other than what it is specified to it if it goes beyond their limits there is high chancethis narrow AI will failed. Ex-Amazon alexa(which can perform only those tasks specified to it in its system.) EX-self driving cars,bots in pubg .

- Strong AI

Strong Ai refers to development of Ai to that extent that it can perform tasks at same efficiency as perform by the human being .It is still in developing process .Researchers are trying to build machines compatible with general AI.
Till now there is no machine with features of general Ai .It still needs efforts ,time and money to build that type of advancedversion of Artificial Intelligence.

- Super AI

In this artificial intelligence get advanced to that level that it go beyond the capabilities of human beings .In this robots performed better than human beings in every cognitive functions be it reasoning ,thinking and solving problems etc.
It still a hypothesis.it can take huge amount of time to implement this concept.

B. According to functionality

- Reactive Machines

These machines developed at the starting phase of evolution of Artificial Intelligence .These machines do not have memory sothey can't function according to previous experiences. They can perform basic tasks according to various inputs .They can't learn from their previous experiences so they can't use experiences for future purposes.

- Limited Memory

These type of system can learn from their past experiences and can use these experiences to function accordingly in future circumstances .In today's scenarios these system used the concept of deep learning in order to gain experience about particular thing and react accordingly. They have huge amount of data related to training. Most of the devices in present day AI market fall under this category. Ex-Machine which scan the fingerprint and store it for future authorization.

- Theory of Mind

This type of system of artificial intelligence still in research and development stage.
According to this field of Artificial intelligence machines are able to understand the emotions of human mind and act accordingly . In this machines are able to talk like humans socially by understanding their belief and emotions .

- Self awareness

In this concept machines have consciousness of their own and they are able to self aware of their environment. Machines willbe far more smarter than what human mind can possess. For now this is a impossible thing to do it can take generations to implement this concept.

3. FINDINGS

3.1 Challenges with AI

- Data that is required to run the Ai systems is insufficient .The quality of these data is poor for implement in Ai systems .These data need to arrange in such a way that it can be useful .In order to organize the data it can take lot of work and time to make these data compatible with Ai systems .
- Infrastructure needed for Ai implementation is underdeveloped .
- Professional required for the development of AI tech is comparatively less compared to growing demand for development ofAI technology for the ease of life.

- The power needed to computing the data to be used by Ai systems is very high that possess very challenges to organizations to develop system which have enough power to compute given set of data to be used Ai algorithms .
- Now a days new challenges arises of sensitive data. Law of the land in some cases prevent a company to get some specific type of sensitive data from the citizen of the country using Ai systems.

3.2 History of Artificial intelligenceYear(1940-1960)

In year 1943 for the first time walter pits and warren mcculloch give the concept of neurons made artificially.

In Hebbian learning scholar named as Donald hebb give a way to change the strength between the connections of neurons.Itwas happen in 1949.

A test called turing test demonstrated by mathematician known as alan turing .In this test ability of machine is checked whether machine behave same in terms of intelligence in comparison to human intelligence.it was happen in year 1950.

Logic Theorist was the first program written in the field of artificial intelligence. The main function of this program is to provegiven no of theorems. It was developed by Herbert A. simon and allen newell.

In Dartmouth Conference John mccarthy was the computer scientist adopted the term Artificial intelligence for the fist time.

Year (1960-2000)

Eliza was the first chatbot created by joseph Weizenbaum in the year 1966.

Wabot-1 was the first robot(humanoid) have the intelligent capabilities in the year 1972.it was made in japan.

From years (1972-1980) there is phase of Ai winter because of lack of funding by government for research purposes. Due tothis popularity of Ai get reduced.

The ability of making decisions as that of the human being explored with help of emergence of expert systems during the year1980.

Stanford University hosted the first conference of (AAAI) during the year 1980. Again, during late 80s and early 90s there was emergence of another Ai winter. Again due to inefficient result and high cost. Government and big investors stop the fundingfor development of Artificial Intelligence. World chess champion (Gary Kasparov) beaten by the Ai system known as IBMDeep blue. It was for the first time any computer able to perform this type of expertise of beating the world chess champion. Year (2000-2021). Till late 90s Ai kept itself limited to be used in research and other purposes but in 2002 Ai system knownas Roomba used in the home for vacuum cleaning. Big transnational companies like Netflix ,facebook also started enteringinto the domain of artificial intelligence during the year 2006. Ai system known as (IBM Watson) won the quiz show knownas jeopardy in 2011.It is shown that AI system can solve the complex problems.

4. CONCLUSION

AI is in the middle to a brand-new company of construct computational fashions of intelligence. The essential assumption is that intelligence Challenges India faces in field of Artificial Intelligence (human or otherwise) can be represented in terms of photo structures and symbolic operations which can be programmed in a digital laptop**.** In India there is not sufficient talent in order to boostthe domain of artificial intelligence. Only around 4-5 % of total working professional have enough knowledge about artificial intelligence. In India there is lack of AI infrastructure needed to boost this field. Awareness related to AI is comparatively less in Indiaas compare to other developed nations.Many startups not able to prosper due to lack of infrastructure.

5. REFERENCES

[1] https://www.pro-sapien.com/blog/how-ai-has-advanced-during-21st-century-and-where-its-headed/
[2] https://business.adobe.com/blog/perspectives/5-examples-of-ai-in-our-everyday-lives
[3] B. Smith, “An approach to graphs of linear forms (Unpublished work style),” unpublished.
[4] iiasfutured.com/role-of-artificial-intelligence-in-21st-century/
[5] https://www.livemint.com/Science/LMgQKEAcoymrtpGz7JWSyJ/Artificial-intelligence-will-be-the-defining-tech-of-the-21s.html
[6] https://medium.com/cityai/thinking-with-technology-the-rise-of-ai-in-the-modern-world-a7566740581f
[7] https://en.wikipedia.org/wiki/Applications_of_artificial_intelligence
[8] https://abeservices.in/blogs/artificial-intelligence-and-machine-learning-what-is-the-difference-where-to-study-them/
[9] https://business.adobe.com/blog/perspectives/5-examples-of-ai-in-our-everyday-lives.

