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A SURVEY ON CONCEPTS OF ARTIFICIAL INTELLIGENCE AND ITS FUTURE SCOPE

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Abstract: This document explores the current market trend around Artificial Intelligence (AI), highlights the differences between human intelligence and AI, highlights the current importance of AI, lists its benefits and discusses its impact on various aspects of our lives. It also includes a study that assesses the future impacts, opportunities and risks associated with AI technology. It addresses the challenges of the future due to the development of artificial intelligence and examines the impact of artificial intelligence on the future landscape. The technology of artificial intelligence has a rich history characterized by continuous development and growth. Artificial intelligence focuses at its core on the development of intelligent agents. These include devices that can sense their environment and take action to maximize the probability of achieving predetermined goals. In today's digital world, artificial intelligence enables machines, computer programs and systems to perform tasks that normally require human intelligence, such as problem solving, inference and decision making. In addition, most computer systems have learning capabilities that enable iterative improvements in performance over time. Recent advances in artificial intelligence tools, including machine learning, deep learning, and predictive analytics, aim to improve skills such as observation, learning. , reasoning, cognition and decision making. This article explores the basic principles of modern artificial intelligence and looks at various representative applications in various fields.

I. INTRODUCTION

"Artificial intelligence is an activity dedicated to the creation of intelligent machines. Nursingd has an intelligent quality that allows an entity to function appropriately and predictably in its atmosphere. From this perspective, the characterization of artificial intelligence depends, for example, on how much of the synthesized software and hardware must be represented in order to function "correctly" and "predictably." "a simple electronic calculator does calculations much faster than the human brain and almost never makes mistakes. 4 Is a calculator smart?" Like Nilsson, the research team generally believes that intelligence is on a multidimensional spectrum. According to this reading, the difference between the arithmetic calculator and the human brain is not one of individual difference, but of scale, speed, degree of autonomy and universality. The same substances can be used to evaluate all kinds of intelligences—speech recognition packages, animal brains, car cruise control systems, Go-play apps, thermostats—and assign them to some convenient place on the spectrum. While our legal activism sometimes superimposes a calculator on the intelligent spectrum, such simple devices are not the same as today's artificial intelligence. The frontier of artificial intelligence has come a long way, and calculator functions are just one of the millions that today's smartphones can perform. AI developers are currently working to increase, generalize and scale the intelligence of smartphones. In fact, the AI sector may be an ongoing effort to push the boundaries of machine intelligence. Ironically, the eternal fate of AI losing its rights to its acquisitions, which are eventually and inevitably pushed to the limit, is a recurring pattern known as the "AI effect" or "strange paradox" - a similar pattern that may well continue. in the finite future, AI will not "bring" a life-changing product like a bolt from the sky. Rather, AI technologies evolve continuously and incrementally. a record in one state of affairs can also be a variable in another - depends on the goals of the analysis.) When the number of variables is large, the curse of dimensionality really starts to bite - the area unit of one binary variable is on. the order of 10300 cells, which makes even a billion records meaningless. The problem of limited data repositories is only the beginning of the difficulties caused by giant data. Perhaps because statisticians love a single file, a data area unit is not stored as a single file, but as several linked flat files. There may be a data structure that does not allow easy traversal of the entire dataset. It is possible that very large data sets are not all stored in one place, but are distributed. This enables a complex and lengthy working and sampling method. Because of the structured ways in which a unit of information is essentially stored, simple mathematical methods may not be applicable and layered or clustered variations are required. Experiments that show the different relationship between artificial intelligence and human intelligence are: the Turing test; To assess what intelligence is and how machine intelligence differs from human intelligence, the Turing Test provides very important insight into the field of artificial intelligence by highlighting how a machine simulates human thinking. Turning should review the algorithmic aspects of AI tools. This algorithm does not primarily lead to AGI, but can also rely on applied artificial intelligence. An algorithm configured using a Turing process can also essentially determine and transmit that.

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Test Eugene Goostman; Goostman looks at the Turing test and everywhere that it is the 33rd light, which meant that he proposed a test that should depend on artificial intelligence to effectively solve certain tasks that were quite close to AGI. He also concluded that AI machines cannot be much more efficient than humans because they always act as human agents when working with an AI machine.III. HUMAN INTELLIGENCE VS ARTIFICIAL INTELLIGENCE Artificial intelligence refers to the ability of computers/controlled machines/robots to perform human or similar tasks. In this case, artificial intelligence is used to develop various robots that have human intellectual qualities, behavior, learning from past experiences, perception and the ability to predict and determine the meaning of certain states of affairs. Robotics is a trend in today's natural life that has emerged in various fields such as industry, hospitals, schools, military, music, gaming, quantum science and many more. Artificial intelligence is a master's degree in economics, which means robotic thinking in computer and package management with expert systems that describe highly intelligent behavior. , learning and effective advice for users. In general, AI basically refers to the flexibility or potential of artificial intelligence in decision-making, problem-solving and reasoning. There are many innovations in artificial intelligence, such as robot cars that do not require a driver to drive or control. In addition, artificially intelligent technology (robots) includes intelligent machines that process large amounts of information that cannot be completed by humans. Therefore, AI is a bold repetitive task that requires creativity and cognitive content. In addition, artificial intelligence (AI) is a combination of various technologies that enable robotics to understand, learn, perceive or perform human actions autonomously. In this case, AI programs (robots) are built to achieve a specific goal, such as learning, acting and underestimating, while human intelligence is essentially related to various multitasking abilities. In general, the AI tool mainly focuses on highlighting robotics that describes human behavior. But artificial intelligence can fail at some point due to the differences between the human brain and computers. In short, AI has the potential to mimic human nature or behavior. Also, AI is currently being partially developed, not by developing abilities that can speak for themselves, but by being commanded to act..

II. ARTIFICIAL INTELLIGENCE

SURVEY ON TODAY'S ARTIFICIAL INTELLIGENCE

THE study of today's artificial intelligence
Today's artificial intelligence (robotics) has the ability to imitate human intelligence and perform many tasks that require thinking and learning, solving problems and creating many choices. Artificial intelligence software or programs that are connected to robots, computers or various connected systems to claim the ability to think. However, many current systems of artificial intelligence (robotics) are still under dialogue because they would still like a lot of analysis of their solution tasks. Therefore, AI machines or systems must be able to perform desired tasks without causing fat errors. In addition, robotics must be able to perform various tasks without human guidance and assistance. Today's artificial intelligence, such as robotic cars, measures very advanced high-performance artificial intelligence such as traffic control, speed minimization, self-driving cars and SIRI is rapidly developing [26]. The current focus on describing artificial intelligence in robots to develop human-like characteristics greatly increases human dependence on technology. In addition, the ability of artificial intelligence (AI) to effectively perform every narrow and cognitive task significantly increases human dependence on technology.

Artificial intelligence tools that can process huge amounts of data on computers can give those who manage them and analyze all the information. Today, this greatly increases the risk, which makes the possibilities of obtaining and analyzing someone's information incredibly high. Recently, artificial intelligence has been described as an artificial representation of the human brain that tries to simulate their learning process with the goal of imitating human brain power. It is necessary to convince everyone that artificial intelligence, which cannot be created, is enough for the human brain. So far we have used only a part of our abilities. Since the level of knowledge is developing rapidly nowadays, only part of the human brain is necessary for this. Because the potential of the human brain is unparalleled, we can now imagine and witness. The human brain contains about 100 trillion electrically conducting cells, or neurons, which provide incredible computing power to perform tasks quickly and efficiently. It has been analyzed from studies that so far the computer has the ability to effectively perform 134,341 multiplication by 989,999, but it still cannot perform things such as learning and dynamic understanding of the world and recognizing people's faces..

III. ADVANTAGES OF ARTIFICIAL INTELLIGENCE

Artificial intelligence is changing the competition and growth of different companies in different parts of the world, representing a new factor of production that can increase the company's profits. aligns with ethical and moral values that provide positive feedback and empower people to do what they do best, such as innovation. Thanks to the successful implementation of AI solutions, many industries around the world will benefit from improved profitability and look forward to further economic growth. To take advantage of this opportunity, the study outlines eight strategies for the

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successful implementation of AI, which focus on adopting a human-centered approach and taking innovative and responsible steps to implement the technology in businesses and organizations around the world. Building intelligent machines in industry requires the existence of symbolic structures, the ability to demand them, and the existence of knowledge (raw If AI has as much or more intelligence than humans, political and social changes will inevitably occur in which AI will come). it has all the advantages that come in handy when it realizes that it doesn't need humans in the universe to colonize it. Recent developments in artificial intelligence describe communication satellites orbiting in space with 486 processors. In the future, anyone can easily produce self-replicating artificial intelligence. humans outside of Earth and humanity will never be able to fight as equals in a vacuum. Artificial intelligence has helped us in almost every aspect of our lives and has a huge potential to increase productivity and improve the future. The origins of artificial intelligence can be traced back to Alan Turing's progress in decoding messages during World War II. The term as such was first used in the 1950s, but only in the 1980s did research begin to grow with the solution of algebraic equations and the analysis of texts in different languages. The final growth of artificial intelligence came in the last decade with the rise of the Internet and the power of microprocessors. Artificial intelligence may be the most alarming technology the world has seen since the Industrial Revolution. Paul Daugherty, chief technology officer at Accenture, wrote in a recent article published by the World Economic Forum. The industry is now thriving thanks to the spread of ubiquitous computing, affordable cloud services, new algorithms and other innovations, Daugherty adds. The development of artificial intelligence goes hand in hand with the development of processors, which over time has led them to think of these technologies as intelligent, even changing our understanding of intelligence and understanding of "machine", a traditionally non-intelligent ability. previously considered only human.

The Englishman Alan Turing introduced artificial intelligence to the scientific community in 1950 in his article "Computational Machinery and Intelligence". Although research into the design and function of computers began a long time ago, the idea of an intelligent machine gained the attention of researchers only after the publication of Turing's work. The work of Turing, who died prematurely, was continued in the 1950s by John Von Neumann in the United States. His central contribution was the idea that computers should be designed using the human brain as a model. Von Neumann was the first to anthropomorphize the language and concept of computing, talking about computer memory, sensors, etc. In the early 1950s, he built machines based on what was known about the human brain and designed the first programs stored in computer memory. McCulloch (1950) articulates a radically different view, arguing that the laws governing thought lie in the set of rules governing knowledge, not in matter. This idea opened up great possibilities for artificial intelligence.

Furthermore, Minsky (1959) changed his position and argued that brain mimicry at the cellular level should be abandoned. The main assumptions of the theoretical core of artificial intelligence was the emphasis on the recognition of thoughts outside the brain. In 1958, Shaw and Simon developed the first intelligent program based on their computer model. This model of Newell, Shaw, and Simon soon became the dominant theory in cognitive psychology. In the late 19th century, quite powerful formal logic was acquired, and in the middle of the 20th century, machines and the solution algorithms that use them.

IV. FUTURE SCOPE OF ARTIFICIAL INTELLIGENCE

There is a great increase in the discussion about the importance of AI in the recent time leading to future discussions about the existence of Artificial Intelligence in the world. The idea creating} AI is geared toward making human life easier. However, there's still a giant dialogue concerning benefits and downsides of AI within the whole With the introduction and successful implementation of Artificial Intelligence (AI) solutions, many industries in the world are and will benefit from increased profitability and will still have good economic growth rates. In addition, artificial Intelligence opportunities will be aiming at innovative, human centered approaches and measuring the applicability of robotic technology to various industries and companies in the entire world.

Artificial Intelligence will also revolutionize the way different companies in the world grow and compete by representing new production ideas that will derive profitability in businesses .So as to realize such opportunities, it will require most of the companies in the world to become more active in the development of various Artificial Intelligence strategies such as placing human factors to central nucleus. In addition, they will focus on developing various responsible Artificial Intelligence machines having moral and ethical values which will result into positive results and empowerment of people to do things that they are well versed with. Construction of various Artificial Intelligence systems will help the entire world to industrial sector to presuppose the available symbolic structures such as, the ability to reason and also knowledge existence.

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In addition, at the time Artificial Intelligence acquires intelligence greater or equal to that of human beings, there will be a concern about social and political change .In furthermore, AI can have all the benefits of colonize the planet while not the assistance of citizenry. In the near future, self-replicating AI could be made where human colonies beyond the earth will never have potentials to fight in the free space with critical terms. The future Artificial Intelligence in various regions in the world may be as a result of various investigation technologies such as stellar travel, teleportation and others the data mining tasks related to these information don't seem to be new, but are described in this section because of their importance and because they typically utilize specialized data mining methods. As an example, text mining tasks include classification (i.e., text classification) but the methods used must take into account the unstructured nature and high dimensionality of the data. Other data processing tasks, such as link mining, can be considered a new type of data mining task, although they may still be used in conjunction with existing tasks (i.e., link mining is accustomed aid in classification).

V.CONCLUSION

In this way, artificial intelligence can achieve great discoveries and advances for humanity due to its multiple possibilities. Most computing systems have the power to be told, which allows people to improve their performance over time. The adoption of AI outside the technology sector is at associate early or experimental stage. The proof suggests that AI will give real price to our lives.AI bases its operation on accessing vast amounts of knowledge, process it, analyzing it and, per its operation algorithms, executing tasks to solve certain problems. Due to the new computing architectures of the cloud, this technology becomes more affordable for any organization.

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