

# ARTIFICIAL INTELLIGENCE THE FUTURE OF LEARNING

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## **What is Artificial Intelligence?**

[1] Artificial Intelligence is the duplication of human intelligence processes by machines. It is the technology of making updated machines, updated computer programs. It is developed to connect human brain with computer intelligence and work more efficiently than humans. There are three types of artificial Intelligence 1. Artificial Narrow Intelligence 2. Artificial General intelligence 3. Artificial Super Intelligence. AI is leading many industries with its advanced technology. The future with artificial intelligence is easy. AI works by gathering large amount of data with fast, reiteration processing and intelligent algorithms. But AI does not have to restrict itself to methods that are biologically observable. Artificial intelligence is opposed to natural intelligence. [2] The aim of Artificial Intelligence is to identify and solve manageable information deal with problems. AI is a field in computer science. It is a intelligent technology used to develop the computer programming. artificial intelligence is making our everyday life more efficiency and easy to live. Artificial intelligence includes manufacturing robots, self driving cars, smart assistance, disease mapping, social media monitoring, active healthcare management, machine learning, etc... Applications of Artificial Intelligence include natural language processing, speech recognition and machine vision. Artificial Intelligence is widely used to provide personalized guidance to people.

## **History of Artificial Intelligence**

[3] In the history AI are treated to philosophy and imagination. John McCarthy is the father of artificial intelligence. The further inventions in electronics and many other inventions impact on Artificial Intelligence. The first work on Artificial Intelligence was done in 20th century by the British logician and computer explorer Alan Mathison Turing. Lovingly was the first AI robot developed by Shakey from 1966 to 1972 it can do any tasks without step to step instructions. At a conference at Dartmouth college, in Hanover, New Hampshire the name Artificial Intelligence was coined. [4] AI was first developed in 1950's. From 1974 some governments started funding AI to develop their country in the way of technology several inventions were discovered on AI in 1950's. later in 2000's this inventions are overcome by the new technologies. Now AI is capable of understanding complex algorithms and self learning. Japan is the country that is well developed in Artificial intelligence. Artificial Intelligence can be applied in medical field where humans can't solve the problem. By the gradual development Artificial Intelligence it can do the things which humans can't do. Artificial Intelligence was discovered to match the human thoughts with machines. Artificial Intelligence will be the future of Learning.

## **Artificial Intelligence in India**

[5] India was ranked eighth in the top 10 countries by AI patent families in global level. Artificial Intelligence practices benefit India in addressing social needs in sectors such as healthcare education, agriculture, smart cities and infrastructure and transportation. Tata Elxsi is leading artificial intelligence in India. The career in AI is very good in India the AI salary is much higher than the national average salary. In the starting of the 21st century Artificial intelligence has great

boom due to its advanced technology in India. Artificial Intelligence is one of the most trending and competitive field in the present days. It is used by the many of the leading companies today. The growth of AI is increasing day by day. The introduction of Artificial Intelligence into the national economy system is huge and cannot be limited to only some companies. The growth of artificial intelligence from 2020 to 2021 is 28.4%. The global AI software is expected to grow 54% every year. [6] Artificial Intelligence is considered to be the fourth industrial revolution. Artificial Intelligence with its intelligence technology transformed all industries around the world. AI refers to the link of human or animal brain to the computer technology. Artificial Intelligence is making the humans work free. AI taking the works which are dangerous for humans to do. According to 2019 reports applications for AI have grown 270% in four years. Artificial Intelligence machines takes less time than the humans to perform a task. Gradually AI machines are occupying the places of humans in any work.

### **Artificial Intelligence in Healthcare Appliances**

[7] Artificial Intelligence is gradually changing the medical experiments with recent development in the machine learning and computing infrastructure. Artificial Intelligence is used in the areas which previously were deal by the human experts. Now with help of AI many medical experiments were done. Current applications of Artificial intelligence in healthcare includes data extraction from text narratives, predictive algorithms and clinical decision support. [8] Artificial Intelligence aims to imitate human analytic functions .it is bringing ideal shift to health care, by increasing the availability of health care data and fast progress of techniques .Artificial Intelligence have saved many lives with its advanced technology. Many healthcare appliances are created by the technology of artificial intelligence for medical uses. Artificial Intelligence is performing the operations which humans can't perform. Artificial Intelligence with its advanced technology is able to cure many kind of disease. [9] Artificial Intelligence is not a single technology but collection of technologies. Most of these technologies are used in the development of health care appliances. The Artificial Intelligence supports medical field widely. Artificial Intelligence is used in healthcare appliances as managing medical records and other data, doing repetitive jobs, treatment design, medication management, drug creation, digital consultation, virtual nurses, precision medicine, etc..

### **Artificial Intelligence in Manufacturing and Production**

[10] In the present days the manufacturing and logistics systems are supported by well developed computer technology within these technology large amount of data being generated by sensors, machines, systems and people. Artificial Intelligence is leading many of the manufacturing companies. Artificial Intelligence is helpful in making better product design, efficiency of the product and good quality of the product. Artificial Intelligence can ensure the safety of employees. [11] Artificial Intelligence can reduce the time of production and can also reduce the working time of humans .Manufacturing Industry is the keystone of the national economy, peoples everyday life and national security .Artificial Intelligence helps machines to gather more information, finding new ideas , to create new things . AI helps in finding product or equipment failure in advance to prevent the breakdown of the product. By promoting error free sensor technologies and progress of computing methods to lead of intelligence, the use of intelligent manufacturing process has been made possible. [12] Creativity and modification are important to the manufacturing industry, AI machines can help in creating the better product with more efficiency .AI can benefit the manufacturing industry by finding the failures easily and can easily solve the problem. This

development should lead to improvement in the new technologies in the manufacturing. AI is used in developing the methods used in the manufacturing. Big data and AI give a huge boost to manufacturing industry. Software solutions can use the high volume of data generated by a factory to identify regions with similar or repeating characteristics that can be used to make manufacturing process more efficient and reduce their energy consumption.

### **Artificial Intelligence in Security and Surveillance**

[13] There are number of ways in which AI is used in security and surveillance the intelligent technology in Artificial Intelligence is used in security surveillance in many developing cities. It is used in many leading companies in security. Most of the developed countries are using the security cameras that work based on AI. Artificial Intelligence can be used in national security especially in three areas 1.military 2.information and 3.economy. in the military AI is used in making the new capabilities and making the existing capabilities more powerful. [14] Artificial Intelligence is used in finding the terrorists before they are planning to do any attacks. Terrorism depends on surprise in its attacks, terrorists attacks are not random they are very difficult to track. Before the attack terrorists plane and prepare by selecting the target and training executors and traveling to the targeted country .AI is used in finding the terrorists activities and in security of the specific country. AI is helpful in preventing the terrorist attack. [15] Surveillance cameras have excess of usage in every developing cities. There are no place without security cameras security is one of the main thing in every country. With advanced technology every county is trying to improve their security systems. AI is capable of identifying cyber threats and solve them with human interference. AI is used in smart traffic, healthcare, monitoring, and in security needs. Some countries like china, Saudi Arabia have their security robots. AI is used in security such as vehicle bomb detection, home security, threat screening for big events, crime prevention cameras, Military reconnaissance, border control, oil and gas threat detection, infectious disease detection, etc.....

### **Artificial Intelligence in Education**

[16] Artificial Intelligence is making many changes in the education system. We cannot say that AI does not have any impact on Education system. Artificial Intelligence is one of the most developing technological force in the present days and changing many industries and influencing the education system and implementing new ways in learning. It is adding embedded skills, character and good learning in education system. The way of learning is changing by the artificial intelligence by implementing better ways in teaching and learning. Many of the students are interested in learning the Artificial Intelligence. [17] The field of Artificial Intelligence has done many changes and development over the past twenty five years in education system. It created many new opportunities in many fields. It is one of the trending course in the education system. AI helps a student and find outs what does he want to learn and helps in learning which the student is interested. Artificial Intelligence helps the students in making personalized schedule in their learning. Most of the students prefer Artificial Intelligence as their specialization in any course. [18] There are many benefits of AI in education better engagement, curriculum automatic creating, opportunity to find a good teacher. AI helps students in many ways students can receive some more personalized tutoring, technology can present the material for student in a understandable way, AI helps educators identify, learning disabilities, AI helps students to give reliable feedback. The field Artificial Intelligence is producing new technique and learning methods .some students are working on artificial intelligence and gaining some knowledge in the field of artificial intelligence.

### **Advantages of Artificial Intelligence**

[19] Artificial Intelligence takes the less time to do a task as compared to time taken by the humans to do .AI can work 24 by 7 without breaks without extension of time .Artificial Intelligence can take faster and own decision and make the work faster and smarter .AI can take risks instead of humans . AI produces more powerful and more useful computers .Artificial Intelligence applications are used in human intelligence for solving problem or decision making. AI is used in the many of the leading companies and industries. AI is making many changes and development in the technology .AI is applied in engineering, economics, law, manufacture, medicine, modeling, etc... [20] Artificial Intelligence come a long by making many changes in the technology. The term Artificial intelligence was introduced as a 'digital' replacement for the analog 'cybernetics'. George Boole ,Allen Newell and Herbert Simon were founded the first artificial intelligence laboratory. Artificial Intelligence reduces the human errors in any work .AI solutions can help companies to respond to customer queries and solve the customer problems very quickly. [21] Colorectal cancer is the second most dangerous cancer in the world marked in 2020 due to unrefined mortality rate of 12.0 per 100000 inhabitants. It can be prevented if glandular tissue is detected early. Due to development in technology glandular tissue is detected early by using advanced machines. Artificial Intelligence have a greater impact in medical field any kind of disease and virus can be detected early and can be cured easily. The use of artificial intelligence in the medical sector is becoming more important day by day AI performs clinical diagnoses and suggest treatments quickly without requiring the patient to visit the hospital. [22] with the rapid growth of mobile devices and a wealth of rich application services , the internet of vehicles has struggled to handle mathematically intensive and delay in completing the computing tasks. In the resent days mobile devices are rapidly moving towards intelligence to satisfy the mobile users the internet of vehicles is converting into intelligent vehicle internet. Artificial Intelligence is impacting the future of every industry and every human. Artificial Intelligence is the main thing in the development of technologies like big data, IOT, etc...[23] with the advance development in information technology by using cyberspace cybercrimes are increasing day by day .computers and human involvement are not sufficient for protecting the people from cyber crime so there should be advanced machines to stop cyber crime it is possible through artificial intelligence. Biologically inspired computing methods of artificial intelligence have been playing important role in preventing cyber crime.

### **Challenges or Disadvantages of Artificial Intelligence**

[24]Artificial Intelligence comes with a high cost as it is a complex machine apart from installation cost it's repair and maintenance cost is huge. AI is smarter than humans but cannot perform emotions and moral values. they don't know what is ethical is what is legal they don't have their own judgment making skills. In the continuous improvement of artificial intelligence and smart technology AI has developed in a very large way. It is also changing the students traditional learning methods and it is also changing the teaching methods of teacher. Artificial intelligence has a very big impact on the education system. [25] Artificial Intelligence overcoming the ways of natural intelligence. Artificial intelligence is overcoming the human intelligence and making humans lazy and not make them working .Artificial Intelligence cannot improve their experience they can perform the same task again and again. Machines can't think creative, they can perform only what they thought even if they help in designing and creating they can't match the power of human brain. If machines are replaced by the humans, humans lose their job which leads to unemployment the

reason of GDP stable or not growing is because of unemployment. [26] Artificial Intelligence is developing in all areas of humans from the last 10 years. Those who study the robots and artificial intelligence in their education have very big impact in their life. Isaac Asimov has already told us about the dangers of using artificial intelligence in daily life. the general application of artificial intelligence in field of education is very dangerous and should be studied in deep. The companies with AI has a boosting accuracy of 90% but human can have a accuracy of 99%.[27] it is not easy to develop the machines as the equipment is so expensive. It costs so much money and so much time to create a machine and repair it. By using robots in place of humans can cause severe unemployment. machine can be easily destroyed if we put in wrong hands. It is making server changes in the government. All the machine learning models are based on data we have enough date to train them but these data is generated from millions of users around the world, there is a chance that this data can be used for bad purpose. [28] AI is making humans lazy and humans are not doing the work ,in place of humans robots are doing work .every industry is looking for exchange of robots in place of humans which may do similar work with more efficiency. But it cannot replace the human connective work. Machines cannot make a bond with humans when involves team work. If there is a repair in a machine it may lose the information stored in it. Artificial Intelligence is making human life dangerous day by day.

## **Conclusion**

Artificial Intelligence can change the world in the future with its advanced technology. Many industries are developing rapidly because of Artificial Intelligence. Artificial Intelligence is the main factor in the growth and development of a country. Many of the student are interested in learning Artificial Intelligence. Artificial Intelligence is the future of learning. The methods of teaching and learning are changed due to artificial intelligence. There are many advantages and disadvantages of artificial intelligence.

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