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# The Impact of Artificial Intelligence on the Workforce

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#### ABSTRACT

In the present paper we discuss the importance of artificial intelligence in worforce. Artificial intelligence will drive the next revolution in human history, this time unlike any other. It is always about change, and the old opens the way for the new. To get the most out of it, we need to reposition ourself as soon as possible and wait for the advent of artificial intelligence.

Keyword: Artificial intelligence, Machine Learning, Challenges

## INTRODUCTION

The goal of this treaty is to find solutions that people will achieve over the next few years. In short, this question is neither new nor new to students. For now, however, students must learn about new areas of information technology to answer this question. The existence of artificial intelligence is a big question mark for humanity, and even the best science in the world today cannot fully understand what artificial intelligence is, how it works, and what it is. But there is no question about the power of artificial intelligence. It will be a tool to mark the world of the future. If you look at the history of mankind, society has changed with the understanding of new substances and elements. The world changed when new production tools were invented. The world has been shaped in a variety of ways, from using stones as the primary means of production to using atoms to generate energy. The next manufacturing tool that has the potential to change the world is artificial intelligence. As humanity gets very close to the next generation of society, some major tech companies like Google, Amazon, and Testa are using AI to build their manufacturing plants.

Over the years, I have been monitoring the growing use of artificial intelligence at many large tech companies around the world. There are some great products from this company, but that is just the beginning. The progress is very fast and the level of work the AI can do is clear. They try to learn more about artificial intelligence and the world is created right after artificial intelligence is discovered. This report is part of my research on the impact of artificial intelligence on the workforce. When AI changes the world, people first think about cutting their diet three times a day. You can't tell anyone what will happen in the future, but you can predict it. Therefore, it is not possible to properly answer the previous question, but it is a logical answer.

# ARTIFICIAL INTELLIGENCE

The term artificial intelligence, also known as AI, first appeared in a small lecture at Dartmouth College in New Hampshire in 1956 (Brighton2015). Since then, many sciences in many fields, including computer science and philosophy, are still debating what artificial intelligence is. And how do you know if a machine, computer program, or anything else in the lab is artificial intelligence?

#### **Definition of AI**

Before explaining the term artificial intelligence, let's go back to a very basic concept. What is intelligence? How do you know if your dog is smart or not? He can take the ball, so he can take the newspaper if he says he can sit or stand. I say dogs act wisely. Eating, sleeping, breathing, barking, running, etc. All kinds of actions a dog takes to maintain its biological body are normal behaviors, or so-called instincts. And unlike instinct, goal-directed behavior is an intelligent behavior. Immediately, this dog can not only run, but can also run, jump and catch flying sticks. This is an action called intelligent action. So people say you can think. Simply put, what dogs and humans can think of is an intellectual subject, and once we have an idea of intelligence, we can move on to the basic concepts of artificial intelligence. Now that we know the tools and how to make and use them, humanity will not stop here. This is never enough. People are always interested in everything and wonder which machines can work intelligently. What car can you think of? Then he started studying computer science. He

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discovered that the relationship between programs and computers is very similar to that of the mind and brain. All humans and animals are connected from brain to brain. But how can a dog be smart and how can a child be smart? When a child grows up only in a body without a brain, he is a child who always lives by instinct. You become smarter with the ability to learn and improve. Dogs and children need to learn and grow to act intelligently. Back to the main topic, the machine. For machines to work intelligently, we need to create machines that science can learn and develop. This is the origin of the term machine learning on which artificial intelligence is based. Artificial intelligence is a computer program that robots have the ability to learn and improve problem solving, typically performed by humans or intelligent people. There are several definitions of artificial intelligence, some of which are smarter than others mentioned here. • Artificial intelligence is "the field of computers that simulates intelligent behavior on a computer". Artificial intelligence is "the ability of machines to mimic the intelligent behavior of humans". Artificial intelligence is "a computer system capable of performing tasks commonly required by human intelligence, such as visual comprehension, speech recognition, decision-making, and translation between languages." Introduction to Artificial Intelligence: Henry Brighton & x27;s graphical guide divided AI into two forms: strong AI and weak AI (Brighton 2015). There's not much to say about powerful artificial intelligence or the so-called general artificial intelligence (AGI). Artificial intelligence is a kind of intelligent machine that can perform all kinds of tasks like normal humans. Science has speculated that artificial intelligence is on the rise, but no one can predict when or how it will happen. On the one hand, it is blocked by bad artificial intelligence. It is a weaker form of AI that can solve some problems or behave like normal humans, but not all. Merriam Webster defines computer science as: • Applied sciences related to intelligent computer behavior simulation. • The device & #x27; s ability to mimic intelligent human behavior. The definition of AI depends on the goals you want to achieve with your AI system. In general, humans invest in developing artificial intelligence to achieve each of these three goals. • Build systems that destroy like humans. (Strong AI) • Develop systems without understanding human thinking. (Bad AI) • Use human reasoning as a model, but not the ultimate goal.

#### **Definition of Machine learning**

For ease of understanding, machine learning is artificial intelligence or a subset of artificial intelligence (March 2016). For industry experts, machine learning is a class of algorithms designed to receive input data and use it based on statistical analysis to predict output data while still generating data. Data for updating new input data (Rouz.2019). People are too lazy to load data into databases all day in front of their screens, so we can invent "machines" that can search, open, load, store and create databases. In fact, they can "educate themselves". .. it is also interesting to humans that the device itself can learn via the internet. Imagine the amount of data on the Internet. No one can sit in front of a computer screen all day and download this data to their device. All you need to do is connect your device to the Internet. The question is, how can humans make a machine that "learns" something? How do you define "learning"? The answer is neural networks. This is a computer system that classifies data similar to the way the human brain processes knowledge (March 2016). The device can divide objects into groups according to the type, color, size, text, and data of the objects contained in the image. Depending on individual needs, the device can provide the necessary data sets. With free internet access in many industries, you can imagine how much you can save with machine learning technology anytime, anywhere. Machine learning is an artificial intelligence (AI) system related to advances in human information technology. Machine learning allows computers to process new things through analysis, self-learning, observation, and knowledge. Machine learning advances computers by exposing them to new situations, testing them, and optimizing future (albeit similar) decisions without the use of clinical models or methodologies. Machine learning is often confused with database data processing and retrieval (KDD), which uses other methods. Copying human intuition into a particular machine can be tedious. Especially because humans learn and make decisions subconsciously. Like children, machines require extensive training to develop accurate nested algorithms to determine future behavior.

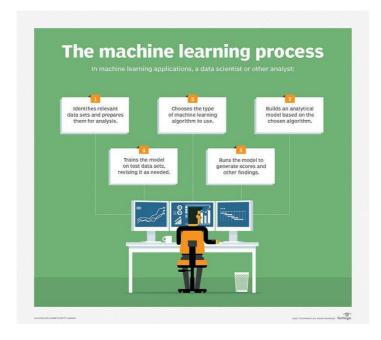


Figure 1. The machine learning process (Source : TechTarget)

Training techniques include preservation, parameter modification, macro operators, segmentation, annotation-based learning, clustering, debug, state registration, multi-model management, backpropagation, reinforcement learning, and genetic algorithms. Theoretical and practical learning also works a little deeper in neural networks. AI accounts are usually classified as modified or unattended. Monitored accounts require information researchers or information experts with artificial intelligence capabilities to provide input and output data. Researchers formulate a model and disclose information about important factors or facts that should be used for estimation. When you're ready, apply the calculations to the items found in the new information.

#### **Definition of Deep learning**

However, deep learning is a bit more complex than machine learning. Deep learning is the next level of machine learning or a subset of machine learning. Deep learning, based on machine learning databases, decides what to do with this data, especially when predicting the future (March 2016). Again, deep learning is an advanced version of machine learning with deep neural networks that allows you to visualize computer systems and classify data into correct wholes, as well as decide how to manage them. : Future work or project. This dataset is a deep neural network capable of processing large amounts of data such as Facebook posts/comments, Google Photos library, etc. Deep learning and deep neural networks exist for intelligent activities that ordinary neural networks cannot execute. These activities require additional work to classify, analyze, and compare the data in the dataset. Contains new input data that is updated over time to make decisions, forecasts, or forecasts.

I mention deep learning and machine learning because there is a basic understanding that smart people need to understand how to use AI better and more abundantly than others. For example, if you browse Facebook or watch a movie and see a lot of ads, you might not wonder how Facebook knows what you want to know and want to see. Wondering where the results come from when you search for something on Google? Why not compare yourself and your friends \$\prec{4}\prec{x}27\$; results with a Google search at the same time? You will be surprised to know the difference. Wondering why? Or have you ever wondered what technology is used in spy movies to find the shortest path to a suspicious vehicle or mission objective? Answer: Deep neural networks and their applications. A neural network is a set of algorithms designed to decompose and recognize patterns as they enter the human brain. Interpret sensory knowledge through some sort of machine recognition, labeling, or initial input structure. Since cognitive models are digital models embedded in vectors, they must translate all real-world knowledge such as images, sounds, texts, statistics, etc., and allow neural networks to be categorized into quantities and categories. You can think of it as a higher ranking level than the information you store and manage as a group. This helps group unclassified knowledge based on similarity between sample characters and classify knowledge based on different data sets for training. Neural networks can also use alternatives that rely on various clustering and classification algorithms, allowing visualization of deep neural networks as part of larger machine learning programs that use the algorithms. All classification activities are tagged according to the data set. In other words, for a neural network to describe the relationship between a beacon and data, an individual must transform their information into a body of knowledge. This is often referred to as supervised learning. • Find faces, write people in pictures, recognize facial expressions (anger, happy) • recognize objects in pictures (stop signs, pedestrians, road signs, etc.) • recognize motion in film • find sound Create a speaker and talk to him. Text-to-Speech (TTS) Sentiment Transformation Recognition • Classifies text as spam (email) or fraud (insurance coverage). Accepting the emotions of text (customer feedback), the cues people make, and important and relevant conclusions may not be ideal for training neural networks.

### AI AS A CHALLENGER TO MANKIND

Humanity is always proud of the smartest species on the planet. In any situation, humans always find a way to survive. Throughout Earth's history, mankind has won several types of land warfare. We have conquered all other species by learning and improving. A person becomes smarter by learning the enemy's strengths and weaknesses and training his biological body after each battle. The ability to think, react, and control life on Earth is unstoppable, but humans also have weaknesses. There is a hole in the center of the chest. It's a small hole, but no one can fill it. We always want more. All of this is never enough. And this weakness leads us to artificial intelligence, humanity's most powerful enemy. Consider the two weapons that make mankind kings of the earth. The ability to learn how to repair and control the body of a living being, and the ability to understand why artificial intelligence could defeat the king of the Earth. Remind me of bad artificial intelligence, a tool that has the potential to solve problems as humans. In 2015, Google launched a program called AlphaGo, a computer program that allows you to play Go (formerly known as AlphaGo). As you know, Go is 1000 times more difficult than Chess. The AlphaGo computer program surprised everyone by defeating five world champions. But that's not the end of the story. The part that many people are not aware of, the part that I thought would be cool for all of you when it was cold. A year later, Google released AlphaGo Zero (Hasbis), another computer program with functions similar to AlphaGo. penny. 2017). AlphaGo Zero achieved a goal no one could have imagined winning AlphaGo with incredible results ranging from 0 to 100 to 100 consecutive victories. Alpha Go Zero is just one example of a bad AI. Take a look at examples of powerful artificial intelligence (AGI) and tell us what the future holds.

### CONCLUSION

As far as I know, artificial intelligence will drive the next revolution in human history, this time unlike any other. The first position in the food chain will be tough this time, but it could happen after 2050. But there is no doubt that the unemployment rate will rise over the next five to ten years. So the sooner you understand, the better you will be. Meanwhile, there was expert advice on how to manage change. I do not know if this helps, but I listen carefully to what they say. Like it or not, artificial intelligence is on the way and you can rest assured that

the whole of humanity wonot stop just because you want it to. Throughout history, humanity has had many opportunities to work with intelligent people such as Albert Einstein and Stephen Hawking with an IQ of 150 or higher. Everything has changed and soon humanity will have to use tools to deal with it. 1000 IQ. speak? Of course I think so. The answer I can give is that AI does not make all the money, so do not be too pessimistic about the future. But you and I have to seriously think about what people can do with AI. It is always about change, and the old opens the way for the new. To get the most out of it, you need to reposition yourself as soon as possible and wait for the advent of artificial intelligence. Nobody knows exactly what to learn and how to prepare because no one can do this because they do not know what to do with artificial intelligence. But get a basic understanding of AI. Updating the AI as soon as possible to see what is going on can be a good factory. As I said before, we are creative as we can beat AI in a world of rules and regulations. Critical thinking is needed more than ever. The sooner you find it, the better. Good luck to everyone.

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