

Can a machine know



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Even though a human is considered to be the most intelligent creature living in this world, who can think and, a machine is any apparatus that is durable and makes life easy, when it comes to completing a tedious job, it's a machine that over takes a human and leaves him far far behind. The scientific definition of a machine "(derived from the Latin machina) however, is any device that transmits or modifies particles" 1 to assist mankind in performing various types of work.

Machines are made with a sole purpose of simplifying man's tasks in his daily activities. For instance, a crane is " a mechanical lifting device that can be used both to lift and lower materials and to move them horizontally. " 2 This is actually man's job when demolishing a building but due to the crane's efficiency, they are more preferable than a group of several men's labour (by the builder). Hence, the job of around a hundred persons is done by a single crane.

Machines are considered to be highly intelligent as they can accommodate an infinite number of information and work 24/7 under all situations, efficiently and accurately, hence they become multi-tasked, yet aware of their surroundings and speak to the user in an understandable manner.

Machines are the most educated instruments of all times. One good example is the computer. Ever since computers came into existence man's work has been a piece of cake. Jamie Sypniewski of Volvo Trucks North America says, " You only have seven solitaire cards.

Well, imagine if human beings had 700 cards in their hand. That's the difference between using a computer system that can handle a lot more

information and keep track of it, versus a human being that doesn't have quite that ability. " 3This shows that computers have high storage ability. As Cavel (a researcher) states, " 1000 brains = 1 computer" 4 he compares the memory capacity of 1000 human brains to a single computer proving computers are much more informative than humans. This proves that machines are very very intelligent than man. Computers have vast amounts of information.

It has information of the past as well as the current. It covers everything from sports to history to philosophy to technology to science and many more. Computers now create programs that solve complex problems better than programs designed by people. The University of Texas at Austria researchers Uli Grasmann and Risto Miikkalainen, for example, recently reported that " a computer- generated algorithm (a computer program designed to systematically solve a problem) can digitally improve images of finger prints better than the FBI's human- designed program currently can.

The FBI has nearly 50 million sets of fingerprints from criminals on file and adds approximately 5, 000 new ones per day, making finger print image compression paramount. In addition, the bureau makes 50, 000 to 60, 000 digital fingerprint image transactions per day. Half related to civil matter and half related to criminal activity. Hence, the computer program simplifies the work of FBI showing that computers are better and efficient in their work than humans. Machines are made in a way to work under any or all circumstances. Machines work in any part of the day or year.

In industries such as the bolt and nut manufacturing industry in Florida, machines work tirelessly and very efficiently. This industry has a series of machines working simultaneously to achieve their one goal of more goods for more sales. These machines are specifically designed to perform a single task which they do perfectly. For example, " a machine only cuts a metal, checks the metal if its cut well, another puts the bolts into the nuts and another that counts and packs them all, ready for exporting. " 6 This makes it easy for mankind to only do his sales while the machine does all the work.

Machines also lessen the duration taken to perform the same task that a man does, yet being very efficient and effective. The Coca Cola Company in Nairobi, Kenya has researched a lot and came to a point to say that the machines they use in their production area is up to " twenty five times faster than when they had men employment. " 7 Hence, it saves up a lot of working hours, making it most preferable compared to man. A machine has the ability to perform several tasks although it itself is only one by number. These are also known as multi -tasked machines.

Machines that fall under this criterion are like mobile phones. Nokia's new collection comprises of the N-series. These kinds of phones are manufactured to carry out multiple-tasks to satisfy the buyers (us). This solitary device can " play up to 6000 music songs, save and play 300 music videos, allows the user to surf on its wireless internet services, allows taking photographs and videos with its clear two to four mega pixel camera, and above all, serves the purpose of normal communication via phone calls or messaging services.

Hence, a small device like this can over power a whole massive human being. Machine being complex yet compact beats human intelligence and capability. These days machines tend to "over smart" humans. They are favoured more than man due to their speed and accuracy. For instance, autopilots are preferred more than human pilots for the sheer reason that "autopilots hardly make any mistakes." ⁹ They take you directly to your destination without any failure. It's like a plane that carries people without being guided.

Therefore, autopilots are said "to know" the route to wherever they are targeted to. Machines also have the magical ability to be able to detect their surroundings just like a human. Recently, robots that have just been invented are able to sense with their 5 senses just like humans. They see, smell, hear, feel and taste like humans do. A research centre establishes that, "a robot can gain an understanding of its surroundings and change its behaviour based on the information its sensors gather." ¹⁰ This tells us that machinery has developed to an extent that they stand side by side with humans.

They can do all that a man can do and do even better. For instance, "a robot with sensors operating in the tetra-hertz (unit of measurement) range, can be employed in an airport or a railway terminal and identify whether some white powder found in a person's hand luggage was harmless talcum powder or something as dangerous as anthrax (drug)." ¹¹ This clearly outlines that a machine can detect accurately and give you the exact type/ kind of substance present as well. I bet humans cannot do that! Machines these days also have the ability to talk like a human.

Robots for instance can speak to you in English. Something you understand. " a robot in Israel can speak up to 113 languages + baby language of a 15 months year old child" 12 conveying exact messages to humans. Also a brilliant British mathematician Alan Turing devised the Turing test as a way of showing a machine was intelligent. The key test, said Turing, was " whether a machine could fool someone into thinking they were talking to a real person. " 13 They are very human friendly, hence, they can act like best friends with whom secrets can be shared.

This may not be possible by man, to the stage of correctness (of languages) spoken by the machine. Therefore, machines can be said to have " knowledge" as they too can listen, understand and reply just like a human, but with a proper and rightful language that the listener comprehends to his best. Although humans were the creator of these miraculous devices, the machines surpass man. The machines are said " to know" (the ability to undergo certain types of understanding) even though they do not have a physical brain.

We can therefore say machines are definitely smarter, faster, more efficient and better than any human being. Machines do not make mistakes like humans do unless there is a problem in their programming. Another side of a machine's ability can be viewed from the point of view of exploring the machine's " artificial intelligence" meaning the knowledge and understanding a machine has even without an actual physical brain like that of a human. This would talk about how the machine happens " to know".