Perception in humans vs computer

The Essay which I am going to write is about Minds and Computers. Here I will explain that what is a human mind, what a computer is and what is a relation between them. It's all about the idea of constructing or developing artificial intelligence. This question of possibility is not limited only to construction of such an advanced technology which will possess artificial intelligence and will act in a manner as human can do but is also a philosophical question.

The word " perception" comes from the Latin words perceptio, percipio, and means " receiving, collecting, and action of taking possession, apprehension with the mind or senses". [1]

Humans perceive through their minds and senses. So how human mind or human brain works? According to Hippocrates (the father of Medicine)

" Man should be fully aware of the fact that it is from the brain and from the brain only that our feelings of joy, of pleasure, of laughing arise as well as our sorrow, our pain, our grief and our tears. We are thinking with the brain and we can see and hear and we are able to draw a distinction between ugliness and beauty, bad and good what is pleasant and unpleasant."

A computer is defined as a programmable machine that receives input, stores and manipulates data, and provides output in a useful format. So how a computer perceive? The answer to this question is that computer perceives through knowledge of Artificial intelligence.

Is it possible for a computer to learn and becomes capable like humans, to learn from observing the environments, is it possible that computer learn by

trial and error basis. In Artificial intelligence some developers have developed robots that claims that are able and that they can learn like a newborn human baby can do. In my opinion it is not only the problem that is bound to software but also to hardware that hinder the growth in computer technology. As compared to human brain a super computer is unable to take off the powers of a human mind.

In recent years, there was a rapid increase in the improvement and development of electronic race. Day by day the computational speed of electronic computer is increasing. The main focus in this electronic era is to make computers smaller and faster in processing. Transistors replaced the vacuum tubes and then transistors were also replaced by smaller and tiny integrated circuits. With the passage of time all these circuits are incorporated to microchips. The recent advancement in computer technology is forcing humans to think about such computers/robots that will match humans in performance and capabilities.

Lets have a comparison between human brain and computer that whether computer is capable to learn and adopt more or human.

Human brain is capable to receive a lot of information at real time from all the senses at constant rate, so it's natural that human is able to adopt and learn more quickly from its environment and its surroundings. Human brain is capable to get a lot of information of the surroundings only in a single glance that will help the brain to respond in a quick way. Human brain is able to learn by mistakes, by errors, by experiences that may be good or bad and it is due to this learning that makes him capable of dealing with situation

efficiently. It is the common judgment of many people's that human brain as compare to computer is far more superior in acquiring new skills and techniques. On the other hand, the human brain requires more time to espouse to changes like erudition of more skills and quitting of old once. The more we do a particular work repeatedly the more easily it gets. If an individual does the same work for a longer time he gets used to it, than he can even do it subconsciously and it becomes a habit for him.

Computers are getting more and smarter with the passage of time. Computers are capable to learn anything that the computer programmers want to feed it in research centers. Different engines like voice recognition systems are developed in order to nourish the program with different voices that it could pick up patterns in speech, the accents and slangs and that it should recognize them. Another Engine is optical character recognition which is able to pick and choose up fresh information and patterns as it scrutinize the dissimilar styles of writing from its constantly growing database. Some programs are now able to classify between objects, it can place and recognize that object accordingly with their patterns and shapes to different categories. The perception rate of computer is increasing day by day.

Some computer programs are now capable of learning and seeking by trail and errors, they learns from their mistakes and then they records a best solution in its database to tackle that problem or error for future reference. The ways in which computers are learning or we can say the computer learning techniques are getting better day by day and it is progressing in the right direction especially with the stop towards learning by using perceptions. Computer is progressing towards a big revolution and is now

able to use the two most important senses that is senses like sight and sounds. It will be not too far that computer will learn and will be able to observe environment and will learn from examples.

So who is more capable human or computer? Who is better in performance and capabilities? In my opinion a computer cannot over cross a brain and a brain well remain winner and is winner. There are a lot of fields in which a brain is more powerful than a computer. A brain is only less efficient when it is used for only one purpose or specific function. The brain completely depends on how we make it. When it come to calculations and memorizing, computer lefts brain behind.

As now we are somehow up to some extent familiar with what a mind and a brain is. Now I will explain some philosophical problems in artificial intelligence. All these problems are associated with consciousness and emotions.

As we all know that human possesses consciousness. Consciousness is defined as " The ability or state of being aware especially of something within oneself, the state or fact of being conscious of an external object, state, or fact." However it can be used in many different ways. It is occasionally used to refer to our alertness of certain actions or processes that we are conscious of. Sometimes it refers to the ability of awareness of our own self's and also the way in which we distinguish ourselves to the rest of the world.

In the paper " Replication of the Hard Problem of Consciousness in AI and Bio-AI: An Early Conceptual Framework" by Nicholas Boltuc and Piotr Boltuc

they are suggesting that a machine can be equipped with phenomenal consciousness. According to their claim if we know how a phenomenal consciousness works and if we are able to understand its precise operation it is possible to instantiate it in a machine. This is very significant claim; the reason behind this is that if it is true it would discredit the privileged access problem of first-person consciousness. It will cast as an empirical problem of science and not a fundamental question of philosophy. In my personal opinion they did not presented any logical argument about the implementation of human consciousness in a machine. In my personal opinion it is impossible to preclude a machine with human consciousness.

We cannot call a computer to be intelligent unless until it does possesses common sense. It is impossible for a computer to adopt common sense because human common sense works on know-how basis. For example, as we know that " A Bird in Hand is better than two in the Bush" is all related to common sense, yet it is impossible to ride a bicycle through knowledge or by teaching. All we get is our experiences. It is impossible that without experience u will ride a bicycle just by knowing its procedures. It is not because of knowledge that we can eat an apple in darkness. If it is because of knowledge than we would need some parameters to locate our mouth, like the angle of our hand, the position of our mouth, the speed with which our hand is moving etc. All these things we cannot attained without experience. Recent computers are only able to represent things. In my opinion it is difficult to transfer them skills and emotions. This is a large problem in the field of artificial intelligence.

Is it possible to mimic intelligence? Is it possible to copy a significant amout of ' thought' and ' planing' to paste it in a computer. In my opinion no such thing exist as to mimic intelligence. I think it is not possible to copy intelligence because still we are not hundred percent able to know that how our minds works. Till now some questions related to brain like its functionings are yet unanswered.

There is a doubt about the explanatory power of computers programs, Even though if a program makes a computer capable of what a human can do. For example, like understing and talking English, or describing some images, which forces us to think about a question that whether a computer program is doing it in the same way as we humans are doing. Still its not clear that whether the program is correctly explaning our abilities. As we know that existing computers do not do things as we do, it physical level they employe on transistors, interpreters or compilers, computer follows these instructions blindly and there is no evidence that humans do this.

The notion that computers can do in the same way as humans do is systamatically ambiguous. Even it is not possible between two different persons. An arithmatical question calculated by different persons may be same, if they both use the same logarithms, but it will be different if they both are using it in a different bases. This notion does not apply in case of computers because there is no such level for computers at which he do it in the same way as we do it. We cannot say that a pakistani is playing chess in different way than a swedish, because of the fact that the language that is used is different. In case of stratigies both can have different stratigies.

It should be noted that every human does not do things in one way they may fallow different ways to approach a problem, whether its all about playing chess, remembering names, soving problems, perceiving faces, or understanding of a particular language. So it is not reasonable to deny that in a computer simulation which is very much complex. I don't think that it is possible to simulate every aspect of human mind to a computer program.

How is it possible for a computer to feel thirst, to feel naunsance, sexual desires, the feeling to dance, or the feeling which one gets one he is going to loose his balance while walking on ice, to feel hungry, to feel love, to feel sympathy, to feel proud and a lot more which humans feel. It is not possible to construct a computer that will be capable to feel as humans feel.

There are much more peoples who are dreaming for the day to see that mans own thinking creation can take a human form. Who can be a true friend, who will always keep your secrets and will always listen to what ever you say, and it will be your best servant without demanding for leave, or even it can do a lot of things for you from research to minor calculations, all these services without demanding for salaries.

There are much more peoples who feels fear because of different possibilities of AI. Espacially the ones who thinks that what will happen if it goes wrong as we have seen it in some of the blockbuster movies. Movies like the Matrix, the teminator, the cyborg, universal soldiers, eye robot and a lot more. They all tells us the stories about when artificial intelligence goes bad. Movie or no movie, all we should worry about is that anything can

happen. I am not arguing that what the story writers want to say is correct or incorrect.

The fact which all know is that there is a lot of differnce between God made and Human made thing.