Blue Brain

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***Abstract*:- Today scientists are in research to create an artificial brain that can think, respond, take decision and keep anything in memory. The aim is to upload human brain in to machine. So that man can think, take decision without any effort.**

After the death of the body, the virtual brain will act as the man. So, even after the death of a person we will not lose the knowledge, intelligence, personalities, feelings, and memories of that man that can be used for the development of the human society. Technology isgrowing faster than everything. IBM is now in research to create a virtual brain called "BLUE BRAIN".if possible ,this would be the first virtual brain of the world .IBM in partnership with scientists at switzerland'sEcolepolytech-niquefederala de Lausanne's(EPFL) Brain and mind institute will begin simulating the brain's.

Biological systems and output the data as a working 3-dimensional model that will recreate the high speed electrochemical interactions that take place within the interior. there include cognitive functions such as language , learning perception and memory in addition to brain malfunction such as psychiatric disorders .

Depression and autism from there the modeling will expand to other regions of the brain and if successful, shed light on the relationship between genetic, molecular and cognative functions of the brain.

Keywords : Simulation ; blue- gene; module; neural code

I.INTRODUCTION

Human brain is the most valuable creation of god. The man is called intelligent because of the brain. The brain translates the information delivered by the impulses. Which then enables the person to react but we loss the knowledge of a brain when the today is destroyed after the death of man That knowledge might have been used for the development of the human society. What happen if we create a brain and upload the contents of natural brain in to it?

The name of the world's first virtual brain. That means a mechine that can function as human brain. Today scientists are in research to create an artificial brain that can think, respond, take decision and keep anything in memory. The aim is to upload human brain in to machine. So that man can think, take decision without any effort.

II.BLUE BRAIN

After the death of the body, the virtual brain will act as the man. So, even after the death of a person we will not lose the knowledge, intelligence, personalities, feelings, and memories of that man ,that can be used for the development of the human society. No one has ever understood the complexity of human brain. It is complex than any circuitry in the world. So the question may arise "is it really possible to create human brain"? The answer is "yes" because whatever man created today always he has followed the nature. When man does not have a device called computer, it was big question for all. Technology is growing faster than every thing IBM is now in research to create a virtual brain, called "BLUE BRAIN".

Figure 1 : Blue Brain

III. VIRTUAL BRAIN

Virtual brain is an artificial brain, which does not actually the natural brain, but can act as the brain it can think like brain, take decisions based on the past experience and response as the natural brain can it is possible by using a super computer with a huge amount of storage capacity, processing power and an interface between the human brain and this artificial one. Through this interface the data stored in the natural brain can be uploaded in to the computer. So the brain and knowledge, intelligence of any one can be kept and used for ever, even after the death of the person.

VI. HOW IT IS POSSIBLE

First it is helpful to describe the basic manners in which a person may be uploaded into a computer. Raymond recently provided and interesting paper on this topic in it, he describes both Invasive and noninvasive techniques. The most promising is the use of very small robots, or nanobots. These robots will be small enough to travel throughout our circulatory systems. Traveling into the spine and brain. They will able to monitor the activity and structure of our central nervous system.

They will be able to provide an interface with computers that is as close as our mind can while we still reside in our biological form. Nanobots could also carefully scan the structure of the connections between each neuron.They would also record the current state of the brain. This information, when entered into a computer, could then continue to function as us. all that is required is a computer, with large enough storage space and processing power ,is the pattern and state of neuron connections in our brain truly all that makes up our conscious selves ?may people believe firmly those we possess a soul .while some very technical people believe that quantum forces contribute to our awareness. But we have to now think technically. Note, however, that we need not know how the brain actually functions to transfer it to a computer. We need only know the media and contents.

V. EXAMPLE OF BLUE BRAIN

A. A very good example of utilization of blue brain is the case "short term memory".
B. Another situation is that when a person gets older then he starts forgetting to a person
C. For the above reason we need a blue brain, it is a simple chip that can be installed into the human brain for which the short term memory at the old age can be avoided.

VI.APPLICATIONS OF BLUE BRAIN

A. Cracking the neural code
B. To develop a new breed of supercomputer
C. Understanding neocortical information processing
D. A global facility
E. A foundation for whole brain simulations
F. A foundation for molecular modeling of brain function
G. A novel tool for DRUG DISCOVERY for brain disorders

NATURALBRAIN	SIMULATER BRAIN
INPUT: Sensory cells &neurons.	INPUT: Artificial neurons & cells.
INTERPRETATION: Accomplished by the means of certain states of many neurons.	INTERPRETATION: By means of a set of register.
OUTPUT: Sensory cells & neurons	OUTPUT: Artificial neurons& sensory cell.
MEMORY: Permanent state neuron.	MEMORY: Registers can be stored permanently.
PROCESSING: Past experience stored and the current input.	PROCESSING: stored states and the received input & by performing some arithmetic and logical calculations

Table 1: Natural and Simulator Brain

VII. ADVANTAGES OF THE BLUE BRAIN

A. We can remember things without any effort.
B. Decision can be made without the presence of a person.
C. Even after the death of a man his intelligence can be used.
D. The activity of the different animals can be understood.
E. It would allow the deaf to hear via direct nerve stimulation, and also be helpful for curing many psychological diseases.

VIII. LIMITATIONS OF BLUE BRAIN

A. We become dependent upon the computer system.
B. Others may use technical knowledge against us.
C. Computer viruses will pose an increasingly critical threat.
D. The real threat,however, is the fear that people will have of new technologies that fear may culminate in a large resistance.

CONCLUSION

We will be able to transfer ourselves into computer at will bring both at some point.
It will bring both benefits and harm to human society.
Eventually aim of applying terrific computer power to the simulation of an entire brain.
Very soon this technology will be highly accepted whole over the world.

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