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Crime Detection and Blue Brain Technology in Artificial Intelligence

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Abstract: ***On this paper, we have counseled an idea to locate the crime of humans with the aid of the usage of blue brain generation. The human brain is the maximum treasured introduction of the god within the global but the "Blue brain" or digital brain means a system can act as a human mind, it may think, take choices and respond, and a system can feature as a human mind. The specific identity of humans is their personal creative understanding. After death, it'll get destroyed. But we can recreate their understanding the use of blue mind era. Virtually we referred to as it a virtual brain. The Blue brain is a try to reverse engineer the human brain and recreate it at the mobile degree interior a laptop simulation. After the demise of the body, the digital mind will act as a man. So, even after the loss of life of the character, we cannot lose the information, intelligence, character, feelings, and memories of the human.***

Keywords: The human brain, Virtual brain, Nanobots, Blue gene supercomputer, The neocortex

1. Introduction

Human does now not stay for hundreds of Years however the data in his mind may be stored and used for numerous hundreds of years. [1] Intelligence refers back to the capacity to recognize, think, act, interpret and predict the destiny to gain and handle relationships, ideas, and so forth. It facilitates in selection-making, trouble-solving, gaining knowledge of, and reasoning. The intelligence thus plays a totally crucial role in survival and development beyond the present. The technology that facilitates in this activity is blue mind. The main purpose is to upload the human brain right into a machine. It is able to be used for the development of human society. [2] On 1 July 2005, the mind thoughts Institute (BMI, at the Ecole Polytechnique Fidrale deLausanne, Switzerland.) and IBM (worldwide enterprise Machines) released the blue mind challenge. The primary purpose of this venture. As of August 2012, the biggest simulations are of microcircuits containing round a hundred cortical columns such simulations involve about 1 million neurons and 1 billion synapses. That is about the identical scale as that of a honey bee mind. Its miles were hoping that a rat mind neocortical simulation (~21 million neurons) could be done by using the quilt of 2014. A full human mind simulation (86 billion neurons) has to be viable by using 2023 supplied sufficient investment is received. The studies entail simulating the human mind and studying the organic accuracy, and intelligence of the [2] Human brain. In this paper, we reviewed the blue mind, why we want a blue mind and the functioning of the human brain gadget. Programs of this generation, about the blue gene supercomputer, crime detection with nano Bots, evaluation between human intelligence and synthetic intelligence, and merits and demerits of the usage of this artificial Intelligence.

1) Blue Brain

Blue brain is the call of the arena's first virtual brain. The digital machine is one which could characteristic as, a totally suitable software of an synthetic Intelligence human brain. [4] inside 30 years, we will be able to experiment ourselves into computer systems. We are able to say it's far a virtual mind i.e., an artificial brain, which is not sincerely a herbal brain, however can act as a mind. It could assume just like the mind, take decisions primarily based on past enjoy, and respond as a natural mind. [1] it is feasible through the use of a supercomputer, with a huge quantity of storage capability, processing energy, and an interface among the human mind and the synthetic one.

Focus is part of the herbal global. We consider that attention relies upon on arithmetic and good judgment, legal guidelines of physics and chemistry and biology; it's not magical. The concept of mind uploading is based on this mechanical view of the mind. It denies the ritualistic view of human existence and attention. Eminent laptop geniuses and neuroscientists have foretold that specifically programmed machines might be able to thought and even reach some stage of recognition. Such gadget intelligence capacity may provide a computational substrate necessary for importing.

2) Why we need a Blue Brain?

Intelligence is an inborn excellent that cannot be created. A few human beings have this nice in an effort to suppose as much as such an quantity that others cannot reach it. Human society is constantly in want of such intelligence and an smart brain to have with.[3] however the intelligence is lost together with the frame after demise. The digital brain is a

method to it. The brain and intelligence will be alive even after death. We frequently face problems in remembering matters inclusive of humans's names, birthdays, the spellings of words, proper grammar, important dates, historical facts, etcetera. In a busy life, anyone desires to be comfy. Can't we use any system to help with this kind of? Digital brain may be a better solution for it.

We want a blue mind because of the following:

- To upload contents of the natural mind into it.
- To preserve the intelligence, knowledge, and talent of any man or woman all the time.
- To recall things without any attempt.
- To shop the records securely it's far retrieved on every occasion it wishes.
- The brain and intelligence can be alive even after demise.
- Virtual machines can produce a higher strategy to human problems.

3) Functioning of the Human Brain System

Basically, the functioning of the Human Brain depends on the following:

a) The cerebrum
b) The cerebellum
c) The brainstem

a) Cerebrum

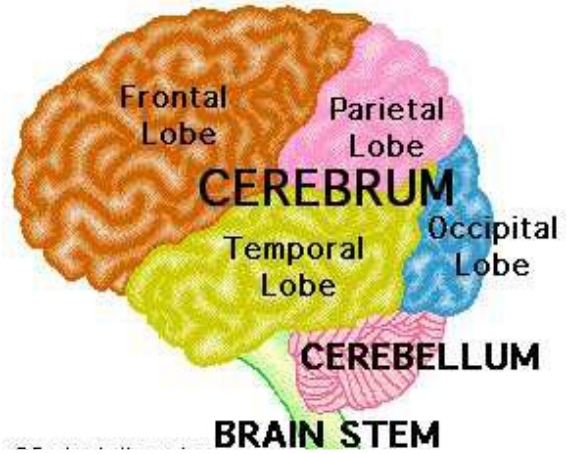
The cerebrum or cortex is the most important part of the human brain, related to higher mind capabilities which include thought and movement. The cerebral cortex is split into 4 sections, known as "lobes": the frontal lobe, parietal lobe, occipital lobe, and temporal lobe. Right here is a visual representation of the cortex:

b) Cerebellum

The cerebellum, or "little brain", is much like the cerebrum in that it has hemispheres and a particularly folded floor or cortex. This shape is related to the regulation and coordination of motion, posture, and balance. The cerebellum is believed to be plenty older than the cerebrum, evolutionarily. What do I imply via this? In Other words, animals that scientists count on to have advanced prior to humans, as an instance, reptiles, do have evolved cerebellum. But reptiles do no longer have a neocortex.

c) Brainstem

Underneath the limbic machine is the brain stem. This shape is liable for simple vital existence features such as respiration, heartbeat, and blood strain. Scientists say that that is the "simplest" a part of human brains due to the fact animals' entire brains, consisting of reptiles (who seem early on the evolutionary scale) resemble our mind stem.



4) Applications

- Gathering and Testing 100 Years of Data.
- Cracking the Neural Code
- Understanding Neocortical Information Processing
- A Novel Tool for Drug Discovery for Brain Disorders
- A Global Facility
- A Foundation for Whole Brain Simulations
- A Foundation for Molecular Modeling of Brain Function

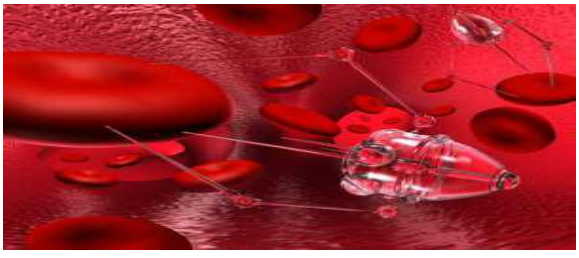
Computer + Neuron Function = Blue Brain

The blue brain records the data of humans thru their neuron function inside the pc. The blue brain will be the international's first virtual mind. Within 30 years, we are able to be capable of test ourselves into computer systems. The digital mind can think like a brain, take selections based on past revel in and reply as a herbal brain. So, the person can assume with none attempt. It's far feasible via using supercomputers, with a large quantity of garage ability, processing electricity, and an interface between the human mind and the artificial one. Through this interface, the statistics stored within the herbal brain can be uploaded to the laptop. So, the mind and the know-how, and intelligence of all people can be stored and used forever, even after the dying of someone.

How it is Possible?

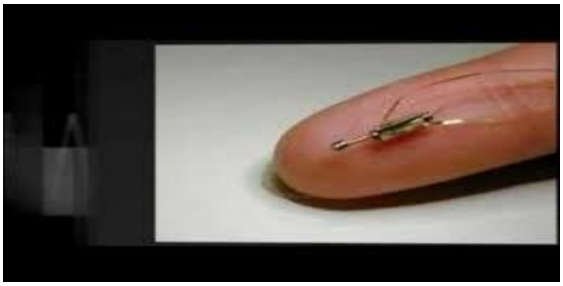
Now the query involves thoughts is it surely feasible to create such forms of brains? The answer to this query is yes.

1) This is viable because of fast-growing era.
2) The importing is viable through using small robots known as Nanobots.
3) These robots are small sufficient to tour in the course of our circulatory gadget. Visiting into the spine and mind, they will be able to Reveal the hobby and structure of our crucial frightened system.
4) They may be able to provide an interface with the computer even as we still reside in our biological shape.



5) Crime Detection Using Supercomputer

The blue mind can file the past experience, recollections, and expertise of the character. Through the use of this recording, we will recover the data of the individual at any time. The use of this benefit, we'd be capable of detect the crime of the man or woman. This approach of detection has many blessings over the lie detector. Within the lie detector, electric powered Voltage is exceeded on to the human frame to discover the crime. The lie-detecting approach presents quite a few aspect results including mental depression, and headaches. However, inside the blue brain method, handiest we simply insert the nanobots into the person who has performed the crime which interfaces with the laptop to file the past info of the man or woman. The nanobots travel the circulatory system of the crime people throughout the circulatory system and it'll purpose a few facts collected from the crime humans. From that, we are able to capable of stumble on the crime of the individual. By applying this blue mind era. This software is a major breakthrough for the crime branch to make the detection of crime.



6) Networks of Neurons

First, a community skeleton is built from all the distinctive kinds of synthesized neurons. Then the cells are connected collectively according to the rules which have been determined experimentally. Finally, the neurons are functionalized and the simulation is delivered to life. The patterns of emergent conduct are regarded with visualization software program. A simple unit of the cerebral cortex is the cortical column. Every column may be mapped to one function, e.g., in rats, one column is devoted to every whisker. A rat cortical column has about 10,000 neurons and is about the size of a pinhead.

7) Merits and Demerits of the Blue Brain:

Merits

- Prothetic devices to restore vision, hearing, or limb control might be the next step.
- It is useful in the medical world for the person having short-term memory loss, or Parkinson's disease and it can also provide a hearing for deaf people.
- Remembering things without any effort.
- Making a decision without the presence of a person.
- Using the intelligence of a person after death.
- Understanding the activities of animals.
- Allowing the deaf to hear via direct nerve stimulation.

Demerits:

- It is similar to the human cloning problem.
- If it is implemented, people become completely dependent on computers.
- Others may use technical knowledge against us.
- Another fear is found with respect to human cloning.

8) Brain Simulation

NATURAL BRAIN	VIRTUAL BRAIN
INPUT: Through the natural neurons	INPUT: Through the artificial neurons or silicon chips.
INTERPRETATION: By different states of the neuron in the brain.	INTERPRETATION: By a set of bits in the set of registers.
OUTPUT: Through the natural neurons	OUTPUT: Through the silicon ship
PROCESSING: Through arithmetic and logical calculations.	PROCESSING: Through arithmetic and logical calculations and artificial intelligence.
MEMORY: Through permanent states of neurons.	MEMORY: Through secondary memory.

9) How to Build A Blue Brain?

It includes the following steps:

a) Statistics series

It entails collecting mind quantities, taking them below a microscope, and gauging the form and electrical behavior of neurons personally. This approach of reading and cataloging neurons is very familiar and global. The neurons are captured by their form, electrical and physiological hobby, the site within the cerebral cortex, and their population density. These observations are translated Into specific algorithms which describe the system, feature, and positioning strategies of neurons. Then, the algorithms are used to generate biologically actual-looking digital neurons geared up for simulation.

b) Information Simulation

The simulation step includes synthesizing digital cells using the algorithms that were determined to explain actual neurons. The algorithms and parameters are adjusted for the age, species, and ailment stage of the animal being simulated. Every single protein is simulated, and there are approximately 1000000000 of those in one cell. First community skeletons are constructed from all of the distinctive kinds of synthesized neurons. Then the cells are connected collectively in line with the rules That have been determined experimentally. Eventually, the neurons are functionalized and the simulation is brought to existence. The patterns of emergent behavior are regarded with visualization pc and vice versa. Very effective Nanobots to act as the Interface between the natural mind and the laptop.

2. Conclusion

In conclusion, we can be capable of switch ourselves into computer systems sooner or later Very soon this generation can be surprisingly typical entire over the arena but knowledge lies inside the proper use. Generation does now not create the brain but the brain creates generation. We are able to be able to transfer ourselves into the pc at some point. In addition, within the destiny, the real dreams would be the realization of the brain-in-pc and chip-in-mind association We consider that the connection with blue mind and Soul Catcher may additionally exceed human intellectual potential by way of round 2017 and that it is in all likelihood that we are able to be able to down load the human mind at someday around 2050. Polygraphy trying out may be performed with the assist of these technologies. The criminals and terrorists can be made to undergo this take a look at for you to recognize more approximately their mind stand activities for you to help us to take important precautions to save our country from the black palms.

3. Future Works

Blue mind technology can be utilized in absolutely paralyzed people to speak with the arena. We have all heard about the very well-known scientist Stephen William Hawking who has a motor neuron ailment and is completely paralyzed. 67is through a speech-generating tool that he communicates with the world. He could be able to make contributions more to the sector of science if he were bodily sound. Via the blue brain technology, we'd be able to make use of the intelligence of such outstanding men for future developments.

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