Wearable Artificial Brain: A Review

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Abstract:
Artificial Intelligence (AI) is a vast field which is increasing day by day. Artificial Intelligence is actually human working like a machine. Research in AI has built upon the tools and techniques of many different disciplines, including formal logic, probability theory, decision theory, management science, linguistics and philosophy. AI research is divided into subfields that focus on specific problems or on specific approaches or on the use of a particular tool or towards satisfying particular applications. In this paper, we think that wearable brain will help in increasing learning power and keep the data in mind updated. This will help in collecting the required data as early as possible. This will decrease the time of learning and the human mind will then work like a computer brain. Although AI in ordinary life, is to help people improve their own human intelligence without the assistance of computers.

1. INTRODUCTION

THERE ARE DIFFERENT types of machine learning which includes neural networks in it. Artificial networks mimic the biological neural network of the brain but as ever, it’s still all about data and relationships. Interconnected artificial neurons send data to each other and the network gives each connection between neurons a weight which can be transformed as the network learns new relationships over time. This means the network can adapt to a large number of inputs and activate the correct outputs, i.e., meaningful information. Neural networks can be used in pattern and sequence recognition, novelty detection and sequential decision making. So, keeping all this point in consideration wearable brain will work like whatever it reads or whichever thing it looks it will keep in its memory and whenever we require the data it will fetch a suitable data and gives us as the output.

2. WORKING

Each side of the brain controls different types of thinking. Additionally, people are said to prefer one type of thinking over the other. For example, a person who is "left-brained" is often said to be more intuitive, thoughtful, and subjective. In psychology, the theory is based on the lateralization of brain function. The brain contains two hemispheres that each performs a number of roles. The two sides of the brain communicate with one another via corpus callosum. The left hemisphere controls the muscles on the right side of the body while the right hemisphere controls those on the left. This is why damage to the left side of the brain, for example, might have an effect on the right side of the body. So from the above concept we can conclude that left brain can help us in constructing a wearable brain. Through this we can improve learning procedure and make it comfortable. Here in this case wearable brain will act like a hard drive of a computer, which will be portable and can be easily, carried anywhere anytime. Wearable brain remembers every valid point in the form of image which can be fetched from the memory in the form of text later.

3. SHORTCOMINGS OF SIMPLE AND EXISTING SOLUTIONS

Now-a-days, spoon-feeding is done to the children from younger age. They are habitual to it and so something innovative or very different cannot be implemented. We can think only those things which are feed up to the mind. To improve thinking capacity now people goes to hospitals, takes different types of pills for improving capacity. Some people also use some harmful technologies which affect their body parts. Some people also do some meditation or yoga to improve their thinking capacity or thinking ability. Today’s generations child or people want to enjoy their life fully so their important times are spent in enjoying and they do not complete their work on time or during exams time students cannot able to cover their whole syllabus and then they go in depression and for this they take many types of harmful medicine, and harm to their bodies, to avoid this situation we can think to made a wearable artificial brain to learn more things in shorter period of time. This will help in to learn more things easily and fast in less period of time.

4. DESIGN GOALS

Our goal is to design this wearable artificial brain to learn in shorter period of time we learn more thing at reasonable cost, utilizing the following explicit goals.

Cost effectiveness: If any normal person want to wear this then they can afford this device and learn more thing in short period of time.

5. MINIMAL CHANGE TO EXISTING DEVICE

In existence there are many devices which are helpful for humans like for different purpose there are different devices .Our motive is to make device which helps in learning process in short duration of time.
6. APPLICATION

i) The field of artificial intelligence is the study and design of intelligence agents able to perform tasks that require human intelligence, such as human visual perception, speech recognition and decision-making.

ii) In order to pass the Turing test, intelligence must be able to reason, represent knowledge, plan and learn.

iii) Using these references we think to make the device which is beneficial for younger generation as well as older generation.

iv) This application will benefit students like if they want to prepare for any examination or any kind of paper when they want to store huge amount of data in their mind.

v) This will help aged peoples who forget things like their memory does not work that properly. They forget about things they want to do, like this.

7. APPROACHES TO BRAIN SIMULATION

Estimates of how much processing power is needed to emulate a human brain at various levels (from Ray Kurzweil, and Anders Sandberg and Nick Bostrom), along with the fastest supercomputer from TOP500 mapped by year. Although direct human brain emulation using artificial neural networks on a high-performance computing engine is a commonly discussed approach, there are other approaches. An alternative artificial brain implementation could be based on Holographic Neural Technology (HNeT) nonlinear phase coherence/DE coherence principles. The analogy has been made to quantum processes through the core synaptic algorithm which has strong similarities to the QM wave equation.

8. IMAGE RELATED TO WEARABLE BRAIN

9. ADVANTAGE

Advantage of this device is:
1. How we learn more thing in shorter period of time.
2. The more data are stored in mind at longer period of time, like any time when we require the data then it will fetch the data, what they want.
3. It will help to save our time.

10. DISADVANTAGE

Disadvantage of this device are
1. Everyone has become lazy.
2. Everyone wants to use this device to save their time.
3. With the help of this device all peoples habit will become like spoon feeding, no one want to learn thing in general way or practical way.

11. LITERATURE SURVEY

Virtually all adults believe it is important to maintain or improve brain health; however, many are not currently engaging in activities that promote brain health.

i) Three-quarters of adults age 40+ are concerned about their brain health declining in the future.

ii) While most adults have not noticed a change in their mental capacities, about one-third say their ability to remember things has decreased over the last five years.

iii) A wide variety of activities are seen as important to brain health. However, when asked what activity is most important, the most commonly reported response is challenging the mind with games and puzzles.

iv) The most influential situations that would encourage engagement in brain healthy activities are things that happen to them personally.

12. FUTURE SCOPE

The future scope of this may be as it is beneficial for younger ones and also for older once, like how to learn more thing in shorter period of time and for new generation who habits of spoon feeding. And it may also helpful for college, school etc. like for teachers to make more and more data for remember as well as students.

13. CONCLUSION

• It can be useful for the ordinary people to improve their skill, knowledge.
• It is also helpful for the saving time.
• It can be affordable by everyone.
• It will not be harmful so it will not give invitation to various diseases.
• Everyone would love to have it as it will be advantageous to everyone.

14. REFERENCES

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