Application of Artificial Intelligence

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Abstract: In this recent times where technology and science take a huge role in human life and scope for the scientists and engineers to enhance their vision and ideas to a great extinct. Artificial technology is the technology which creates revolution in the science area where automation of machines giving a new challenge to the scientists as well as the engineers. Artificial intelligence posseses by both machines and softwares. By the help of this technology, production in industrial area is grown on other level, man power replaced by machine power. Quantity as well as quality is improved, service get improved. Study of soft computing is key to get the knowledge about how the machine become wised and nearly able to think like human. ANNs termed as Artificial Neural Networks were proposed by Dr. Robert Hecht-Nielsen, the idea of ANNs is based on the belief thet working of human brain by making the right connections, can be imitated using silicon and wires as living neurons and dendrites. The implementation of artificial technology improve the efficiency of machines and softwares. Cyber security ostensibly is the discipline that could profit most from the introduction of Artificial Intelligence (AI). It is tough to make software for defending against the powerfully developing assaults in systems. It can be cured by applying techniques of artificial intelligence. Where conventional security systems may be slow and deficient, artificial intelligence techniques can enhance their overall security execution and give better security from an expanding number of complex cyber threats. Beside the great opportunities attributed to AI inside cyber security, its utilization has legitimized risks and concerns. To promote increment the development of cyber security, a holistic perspective of associations cyber environment is required in which AI is consolidated with human knowledge, since neither individuals nor AI alone has proven overall success in this sphere. In this manner, socially mindful utilization of AI techniques will be needed to further mitigate related risks and concerns.

Keywords: Artificial Intelligence, Soft Computing, ANNs (Artificial Neural Network), Silicon, Neurons, Dendrites, Cyber security, Artificial Intelligence (AI), Security intelligence, Cyber defense, Denial of Service (DoS), Self-Organizing Maps (SOM)

1. Introduction

Artificial intelligence emphasis on perception, action and reasoning. Artificial intelligence has a vast scope in future because it is better than natural intelligence, it is more situational, accurate, permanent and willing to give output every time. The intelligence of this technology were used to solve complex problem and improve accuracy of the solution. The Artificial intelligence programs are developed to perform tasks, that is being utilized for a wide range of activities including medical diagnosis, electronic trading, robot control and remote sensing, it is the weak one. Artificial intelligence are developed and advance numerous fields and industries, including finance, education, transportation and more.

A. Turing test approach

'Turing Test' A measure of determining whether a machine can demonstrate human intelligence in thoughts, words,or actions. The Turing test was proposed by Alan Turing in 1950. During the test, one of the humans functions as the questioner while the second human and the computer function as respondents. The questioner interrogates the respondents within a certain subject area, using a specific format and context. After a present length of time or number of questions, the questioner then asked to decide which respondent is computer and which was human. The motivation behind this work is to highlight the deficiencies of conventional security measures and additionally the advance that has been made so far by applying AI techniques to cyber security. Furthermore this works compresses the dangers and concern connected to this advancement, by investigating AI's existing conditions, tending to present concerns, sketching out heading for what's to come.

2. Application of artificial intelligence

A. Aviation

The Air Operation Division (AOD) uses AI for the rule based experts systems. It is used as surrogate operators for combat and training stimulators, mission management's aids. The Articial system used by the AOD in order to measure performance was the interactive Fault Diagnosis and Isolation Systems. In 2017, American Airlines conducted an app development competition with the goal of having an app developed for making baggage screening easier for passengers. The competition, named HackWars, was themed upon artificial intelligence, drones and augmented and virtual reality. The winner, known as "Team Avatar," developed an app that would not only allow passengers determine their baggage size before arriving at the airport, but also prepay any potential baggage-related expenses.

B. Computer system

AI researcher have created many tools and ideas to solve most difficult and complex problems in computer science.AI can be used to potentially determine the developer of anonymous binaries.AI developed: time sharing, interactive interpreters, graphical user interface, automatic storage

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management, dynamic programming, OOPs and many more. In the computing tasks needed to support the higher levels of such processing we will find that artificial intelligence techniques are essential, since the regularity appropriate to algorithmic approaches is typically lacking. However, large databases and single focus information retrieval can be effectively handled by algorithmic approaches. In information retrieval heuristics appear when precision and completeness of search must be balanced with relevance and avoidance of reader's overload. Complexity abounds when there are multiple information sources. There will be mismatches of data representation, of time and space, of confidence, and of level of abstraction. However, the large volume of data needed for many support tasks means that algorithmic approaches, when appropriate, must be exploited.

C. Market analysis and data mining

Many large financial companies invested their large amount of money in the AI engines to assist their investment practices. Bank such as UBS and Deutsche Bank use an AI engine called Sqreem (sequential quantum reduction and extraction model) which can mine data to develop consumer profile and match them with the wealth management's products as they mostly prefer.

D. Robot

Once limited to heavy work, robots have now become refined enough to perform jobs that were typically reserved for humans. Jobs as delicate as assembling consumer electronics are no longer outside of the capabilities of manufacturing robotics. There is no limitation in this sector of development, this is widely regarded and appreciated to get developed for many purposes. Robotics is the area in which the intelligency of this technology get used and there is also vast scope in this for implementing ideas such as

- Military armies
- Factory workers

3. Future scope

A. Job search

Implemented foe auto job search as per your skill and

qualification.

B. Medical industry

Auto prescribed medicine as per patient requirement.

C. Bank system

Auto tax evaluation process as per account detail of person.

D. Games

Artificial Intelligence has a huge and vast scope in area of games. Reality is felt in reference of virtuality by the use of this technology.

E. Auto switch board

This technology is also used in saving electricity. Now a days this become a vital problem for the people as the government. The board will automatically senses the room temperature, that tell somebody is there or not and do on or off as per presence.

F. Transportation

By using AI in this sector we reduce accidents and save human life. Truck drivers will replace by robot driver it will far better, accident will not happen, traffic is not there.

4. Conclusion

Artificial intelligence is the most appreciated or useful technology in now a days and as well as in coming time. The scope which is discussed above, the implementation of that is give a progressive and useful result. The potential of the AI is not marked by scientist yet but in coming days it will take a huge revolution and make a huge change from today.AI has a huge impact on network system in coming days.

References

[1] N Ramesh, "Artificial Intelligence in medicine," 2004.
[2] Vneet pannu, "Areas of AI," 2015 in IJEIT
[3] Holland JH, "Adaptation in natural and AI." 1975.
[4] Jjudea pearl "probabilistic reasoning in intelligent system," 1988.
[5] Mccarthy, Marvin, Minsky, Nathaniel Rochester, Claude E. Shanon, "Birth of AI," Dartmouth conference" 1955.