Review On Artificial Intelligence : A Boon or Bane to Humans

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ABSTRACT

The future world can be said the world of machines that work as intelligently as to replicate the behavior of human mind. This intelligence can be considered as the artificial intelligence.it is the subfield of computer science. Artificial intelligence in the last two decades has greatly improved performance of the manufacturing and service systems. Application areas of artificial intelligence is having a huge impact on various fields of life as expert system is widely these days to solve the complex problems in various areas as science, engineering, medical , finance, banking, business, weather forecasting etc. the world famous companies like Google, Yahoo, Facebook, Baidu and so forth have spent millions of dollars to research on developing new algorithms on artificial intelligence.

Keywords : Categories of AI , Applications of AI , AI in Recent Events

I. INTRODUCTION

Artificial Intelligence is the field where the intelligence is considered as the ability of the machine to gather the knowledge and processing that knowledge to solve the complex problems. Acting, working and thinking like a human mind by the machine is the main goal of AI. Artificial Intelligence can also be stated as the condition of machine opting the 'learning' and 'solving' methods of human mind. The main idea of creating the AI is to make the human life easier. AI is making the human life easier by the different applications as GPS, voice recognition, voice detector, Google Assistant, financial and social medias, picture tagging , face recognition etc. artificial Intelligence is complex in nature. It uses very complicated mixtures of computer science, Maths and other complex science.

II CATEGORIES OF AI

Artificial Intelligence is the ability of machines to perform the task that a normal human can do(not to the perfection but closest to it) with the help of some programs or algorithms. AI can be categorized as-

A) **Weak / Narrow AI** - it behaves like human and seems to be human but in real it worked on the actions entered by the human. Its scope is not so wide and it is not self-modified. For example – Tower of Hanoi problem (moving of some different sized disks in ascending order from one pole to another) , chess playing with computer , card playing with computers etc.

B)   **Strong AI / Broad AI** – it is self-modified to some extent. It can examine itself and can improve to some extent. Strong AI is on the initial stage of development. For example- chat-robots.

II. LITERATURE REVIEW

P Rozewski and J. Jankowski, "Model of Multilayer Knowledge Diffusion for Competence Development in an Organization" proposed several models with the main goals of simulating diffusion and explaining the nature of knowledge diffusion. They extended existing approaches by using multilayer diffusion model and focused on analysis of competence development process in a new way through horizontal and vertical knowledge diffusion in multilayer network. In the network , agents collaborated and interchanged various kinds of knowledge through different layers and these mutual activities affected the competencies in a positive or negative way.

H. Liuetal , "Stereo Matching[2] Based on Immune Neural Network in Abdomen Reconstruction" suggested stereo feature matching is a technique that finds an optimal match in two images from the same entity in the 3-D world. They proposed a novel intelligent biological network(Bio-Net) which involves the human B-T cells immune system into neural network, in order to learn the robust relationship between the input feature points and the output matched points.

Harjit Singh, "AI Revolution and India's AI Development ; challenges and scope" [3]discussed recent advancements in AI at global level and their impact on the global as well as local levels. AI is experienced by different politicians as it is very useful technology. AI is used in election campaign for better use of resources, in journalism, in games etc. online systems of purchasing and transfer is also to extract the information from the data to make an intelligent guess and display the best options of products advertisement. India is lagging behind in the developments of AI but now rather than private sectors government is also started focusing on this field of computer science.

Avneet Pannu, "Artificial Intelligence and its Applications in Different Areas"[1] discussed the use of AI techniques in the field of Power System Stabilizer(PSS) to maintain system stability and damping of oscillation and provide high quality performance , in the Network Intrusion Detection to protect the network from intruder, in the medical area to classify medical image etc. After the study of the paper we can conclude that there is much more in future that we can get from this technology.

III. APPLICATIONS OF AI

A. **In Power System Stabilizers designs-** Power System Stabilizer is an additional control system to apply a signal to the excitation system. In the field of power system operation , artificial intelligence has the ability to deal with the high non-linearityof practical systems. The artificial neural network , fuzzy logic and expert systems technologies are used in PSS.

B. **In Network Intrusion Detection-** Network Intrusion Detection[5] Systems use AI for protecting computer and communication networks from intruders. It is the process of monitoring the events occurring in network and detecting the signs of intrusion.

C. **In Medical Area-** Artificial Intelligence technologies are used to diagnose lung cancer, acute leukaemia, breast cancer, pancreatic cancer, MRI images of brain cancer etc. Genetic Algorithms are used to predict the outcomes in critically ill patients in the medical areas.

D. **In Accounting Database-** Integrating Intelligent[6] System with the accounting database can assist in the investigation of large volumes of data with or without direct participation of the decision makers. The AI and the expert systems builds intelligence into the database to assist users.

E. **In the Computer Games-** Artificial Intelligence is used to solve the common problems in the computer games and provide the features like

non-playing character path finding, decision making and learning to the games. Path finding, Bayesian networks, Fuzzy logic and genetic algorithms are some AI techniques used in the computer games.

IV. AI IN DIFFERENT EVENTS

In the recent time the usage of AI has been seen mostly in the elections, journalism and games. Presidential elections in USA disclosed the use of AI in politics helping to the better use of resources , energy and time in the election campaign. In Indian Prime Minister Elections of 2014 ,some of the AI technologies are used but just as an initiatives. The web robots [7](a software application that runs automated tasks over the internet) are used in the covering of different events i.e. the tasks that are both simple and structurally repetitive at a much higher rate. AlphaGo is a game[8] based on AI which defeated the world champion of Chinese ancient board game GO. In this game MOUTE T CARLO TREE SEARCH (knowledge previously learned by machine learning) is used.

V. CONCLUSIONS

In this research checking of these sequences of data discusses recent advancements in AI at global level and their impact on global as well as local levels. AI is now imposing its effects on each and every field like politics, journalism, games, banking, finance, medical areas and many more. Even in India the initiative has been taken in the development of AI taken. This technology and its applications will likely have far-reaching effects on human life. The AI is boon or bane to the human life all depend on the human mind and its usage by them. AI is overtaking many of the fields and proving the best technology for future with much accuracy and high speed.

VI. REFERENCES

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