ARTIFICIAL INTELLIGENCE IN REAL LIFE

SHIVLI GUPTA

B.Tech Computer Science Email ID: shivli.gupta2021@vitstudent.ac.in

What is Artificial Intelligence?

[1] Artificial intelligence is the science and engineering of manufacturing intelligent machines mainly intelligent computer programmes. It is as same as using computers so they know about human intelligence which is not biological. [2] Artificial intelligence have divided the topic into its major areas of operations such as natural language processing, robotics, machine vision, automatic theorem proving, intelligent data retrieval systems, etc. The main difficulty with this is to approach these application areas are now so extensive, that each could, at best, be only superficially treated in a book of this length. Artificial intelligence ideas that comes under many of these applications. Organization of these ideas is not, then, based on the subject matter of their application, but is, instead, based on general computational concepts involving the kind of data structure used, the types of operations performed on these data structures, and the properties of control strategies used by the artificial intelligence

History of Artificial intelligence

[3] Artificial intelligence is introduced to define the ability to interpret external data correctly, to learn from such data, and to use learning which help to achieve specific goals and task.[4] In history, artificial intelligence is used in finding philosophy, fiction and imagination. Early invention in electronics, engineering and many other disciplines have influenced artificial intelligence.

Growth of Artificial Intelligence

[5] Recently, growth of artificial intelligence, and its implications for understanding human behavior. The range of possible association between sociology and artificial intelligence reflects the extent to which we are wiling to adopt the features of artificial intelligence.[6] the effects of Artificial intelligence depend on a major extent of institution and politics. Artificial intelligence surplus the growth by replacing labor by capital, both in the production of goods and services and in the production of ideas.

AI in Health Care Appliances

[7] Artificial intelligence in health care have effectively enhances the quality of telecare and save medical resources for reasonable distribution and full application so that self-health can enhance and reduce the outpatient visits and save the outpatient time as well as expenditure.[8] Artificial intelligence is used to measure the stress level especially TTH (Tension Type Headache) which is a serious problem in today's world. To measure the stress level, the concept of EEG, EMG and GSR are introduced. In TTH, human is in a state in which one experiences pain like a physical weight or a tight band around his head.[9] Due to lack of social care support, there is an arise of cost-effective assistive healthcare technology for taking care of the elders and giving them best tech-friendly experience.

AI in Manufacturing and Production

[10] Agriculture area and food production are facing increasing pressure from climate change, land and water availability, and most recently pandemic. Thanks to artificial intelligence, we can now quantify field scale phenotypic information accurately and integrate the big data. Artificial intelligence has improved the resilience of agriculture systems. [12] To promote sustainability, smart production requires global perspective of smart production application technology. There are many AI-based techniques, such as machine learning, have already been established in the industry to achieve sustainable manufacturing.[13] Artificial intelligence is used to build intelligent systems, no matter whether utilized in an industrial or private environment. AI- based have been proposed for the increasingly important electric drives production.

AI in Security and Surveillance

[14] Asignificant application of artificial intelligence is intelligent surveillance, which aims to interpret automatically human activity and detect unusual events that could pose a threat to public security and safety. [15] Security cameras and video surveillance system have become important for security purpose. The detection of high-risk situation through these systems are still performed manually in many cities. The lack of manpower in the security sector and human cannot detect danger or delay in detecting threats. The main purpose is to develop a low-cost, efficient and artificial solution for the real-time detection. [16] Surveillance is the process of close observation of a person, place, or object to avoid and minimize the risk of any undesired dangerous situation to maintain normalcy. The use of information and communication technologies have increased the level automation and have made it a part of surveillance application. The aspects of automation have greatly reduced human intervention and have made systems more reliable and efficient.

Artificial Intelligence in Education

[17] Artificial Intelligence have been shown to be highly effective at increasing students' performance and motivation. As in ITS for economics, performed equally well as student taking a traditional economics course, but required half as much time covering the material. [18] Artificial Intelligence in education is concerned with development of artificial Intelligence techniques for the study of human teaching and for the engineering of system that facilitate human learning. It is used to explore and evaluate alternative theories about learning. [19] Artificial Intelligence in education department provides an overview of both the classic and emerging architectures, pointing to the many aspects of Artificial Intelligence that play an important role in creating these systems.

Advantage of Artificial Intelligence

[20] Artificial Intelligence applications are utilized to simulate human intelligence for either solving a problem or making a decision. Artificial Intelligence provides the advantages of permanency, reliability and costeffectiveness while also addressing uncertainty and speed in either solving a problem or reaching a decision. [21] Major advantage of artificial intelligence is that its decisions are based on facts rather than emotions. It is well-known fact that human decisions are always affected in a negative way by our emotions. Unlike humans, machines do not need any sleep. [22] Industrial revolution attempted to create machines that could replace man's physical power. It is one time investment and have make the easy and simple. [23] Artificial Intelligence has the ability to detect and diagnose faults of building energy systems. This paper aims at making a comprehensive

literature review of artificial intelligence-based fault detection and diagnosis (FDD). They showed powerful capacity in learning patterns from training data. [24] Due to rapid advancement of technology, artificial intelligence has been a thriving area in different fields, including medicines. Gastroenterology AI software has been included in computer-aided systems for diagnosis and to improve the assertiveness of automatic polp detection and its classification as a preventive method for CRC.

Disadvantages or Challenges of AI

[25] Some time it can be misused leading to mass destruction. Programme mismatch sometime done opposite to the command, unemployment increases. Younger generation is becoming lazy. Technology dependency increased. [26] It is not an easy task to develop the machine because the equipment are also expensive. Machines can easily cause destruction, if put within the incorrect hands. Artificial Intelligence is making human lazy with its applications. [27] Talent training programs, the training of artificial intelligence awareness and ability has not been really incorporated into vocational education, which has affected the development of professional talent training objects. If the training goal of artificial intelligence is not included in the professional education plan. [28] Challenges of artificial intelligence in healthcare are informed consent to use, safety and transparency, algorithmic fairness and biases and data privacy. Legal challenges are safety and effectiveness, liability, data protection and privacy, cybersecurity and intellectual property law. [29] New technologies that are fusing physical, digital and biological worlds, impacting all disciplines, economics and industries. These rapid and abrupt changes in society that radically changed human life and occurred in a certain period of time.

Conclusion

Artificial Intelligence, as per name, we can imagine the intelligence which is artificial or man-made. Artificial Intelligence is the science of making intelligent machines.

Growth of artificial intelligence is increasing rapidly by replacing labour by capital, both in the field of growth and production. Artificial intelligence has the quality in the field of telecare and save medical resources. It is also used to measure stress level.

It has also help in the field of agriculture as this area and food production area are facing increasing pressure from climate change, land and water availability, and pandemic. Machines are also very helpful for agriculture which have increase the rate of productivity and decrease the stress level of farmer.

In security, purpose it is very important which aims to interpret automatically human activity and detect unusual events that could pose a threat to public security and safety.

For students also it is highly effective. As at the time of Covid-19, all work process is going online and student's study also. And now students can understand easily with the help of artificial intelligence.

Artificial intelligence applications are used to solve a problem or decision making. It had also replaced man's physical power and has ability to detect and diagnose faults. Artificial intelligence make decision based on the facts rather than emotion.

Besides this, there are some disadvantages of artificial intelligence as younger generation is becoming lazy. It will destructive when come in wrong hands. Technology dependency increase. These rapid changes in society had changed human life also.

ISBN: 978-93-92995-10-1

References

A Mayr, M Weigelt, M Masuch, M Meiners, F Hüttel... - ... Manufacturing, 2018 – Elsevier

AI Strong - Science [ETEBMS-2016], 2016 - test.globalinfocloud.com

B Woolf - 1991 - cs.umass.edu

BG Buchanan - Ai Magazine, 2005 - ojs.aaai.org

D Ganesh, G Seshadri... - ... and Informatics (IC3I ..., 2019 - ieeexplore.ieee.org

G Huang, LUO Yu-Zhou, Q Zhi-Wang - Revista de Cercetaresi ..., 2019 - ceeol.com

J Beck, M Stern, E Haugsjaa - XRDS: Crossroads, The ACM Magazine ..., 1996 - dl.acm.org

J Borah, KK Sarma, PJ Gohain - Smart Devices, Applications, and ..., 2019 - igi-global.com

J Jung, M Maeda, A Chang, M Bhandari... - Current Opinion in ..., 2021 – Elsevier

J Kay - IEEE Intelligent Systems, 2012 - ieeexplore.ieee.org

J McCarthy - 2007 - 35.238.111.86

KCA Khanzode, RD Sarode - ... of Library & Information Science (IJLIS), 2020 - academia.edu

M Chowdhury, AW Sadek - Artificial intelligence applications to ..., 2012 - onlinepubs.trb.org

M Guo - proceedings-online.com

M Haenlein, A Kaplan - California management review, 2019 - journals.sagepub.com

M Viscaino, JT Bustos, P Muñoz... - World Journal of ..., 2021 - ncbi.nlm.nih.gov

NJ Nilsson - 1982 - books.google.com

P Aghion, C Antonin, S Bunel - Economie et Statistique, 2019 - persee.fr

R Cioffi, M Travaglioni, G Piscitelli, A Petrillo... - Sustainability, 2020 - mdpi.com

R Rastogi, DK Chaturvedi, M Gupta - ... Intelligence in Healthcare ..., 2020 - igi-global.com

S Bhbosale, V Pujari, Z Multani - Aayushi International ..., 2020 - researchgate.net

S Dimitrieska, A Stankovska... - Economics and ..., 2018 - ideas.repec.org

S Gerke, T Minssen, G Cohen - Artificial intelligence in healthcare, 2020 - Elsevier

S Gong, CC Loy, T Xiang - Visual analysis of humans, 2011 - Springer

S Mogali - ... on Information Technology: Yesterday, Today and ..., 2014 - researchgate.net

S Woolgar - Sociology, 1985 - journals.sagepub.com

S Xu, K Hung - 2020 IEEE 10th Symposium on Computer ..., 2020 - ieeexplore.ieee.org

Y Zhao, T Li, X Zhang, C Zhang - Renewable and Sustainable Energy ..., 2019 - Elsevier