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Research Paper on Artificial Intelligence

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Abstract: Artificial intelligence is the Science of getting machine to mimic the behavior of human machine learning is a subset of Artificial intelligence (ai) that focuses on getting Machine to make Decisions by feeding those data. Artificial intelligence is working on Robotics, Healthcare, Business analytics, Marketing and etc. Many Artificial intelligence applications are not perceived as artificial intelligence because we often tend to think of Artificial intelligence as robotics doing our daily course, but the truth is Artificial intelligence has found its way into our daily life. This Paper examines Features of Artificial intelligence introduction, definitions of Artificial intelligence, History, application of Artificial intelligence and achievements.

KEYWORDS: Machine Learning, Deep Learning, Neural Network, Natural Language processing and Knowledge Based System.

INTRODUCTION

Artificial Intelligence (AI) is the branch of computer science which deals with intelligence of machines where an intelligent agent is a system that takes actions which maximize its chances of success. This article aims to domain of Artificial intelligence. Exploring its principles, challenges and innovative of solutions in new daily updated technologies. It is the science and engineering of making intelligent machines, especially intelligent computer programs.

NEED OF THE STUDY.

The field of artificial intelligence (AI) is one of the most rapidly expanding fields in technology today. With the advancement of machine learning algorithms, natural language processing, and other AI-related technologies, AI is becoming an integral part of how businesses operate, how people interact with devices, and how we can make sense of the world. As such, studying AI is essential for anyone interested in leveraging the power of technology to solve real-world problems.

One of the most compelling reasons to study AI is to learn how to use advances in AI technology to automate and perform tedious tasks. By utilizing AI-based solutions, businesses can streamline processes, increase efficiency, and reduce costs. For instance, by using AI to automate repetitive tasks such as data entry or customer service inquiries, companies can save time and money while being able to focus more on core business operations.

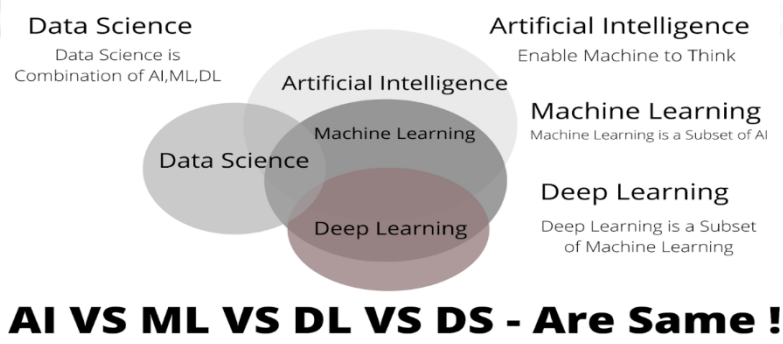

Fig.Ref image on site - https://pianalytix.com/difference-between-machine-learning-data-science-artificial-intelligence-deep-learning/

3.1 ARTIFICIAL INTELLIGENCE METHODS:

i) Machine learning:
Machine learning is one of application Artificial intelligence and it is branch of computer science,that focus on the using data and algorithms to enables Artificial intelligence to imitate the way that humans learn, improving its accuracy, the machine learning works on main three type of algorithms a decision process, an error function, and a model optimization process and the common machine learning algorithms are neural networks ,linear regression, logistic regressions, clustering, decision trees, random forests.

ii) DEEP LEARING:
Deep learning is branch of machine learning Artificial intelligence has becomes one of the most popular and visible areas of machine learning,due to its success in a variety of application, such as computer vision,netural language processing and reinforcement learning. Deep learning is based on artificial neural network retexture an artificial neural network or ANN uses layers of inter connected nodes called neurons that work together to process and learn from the input data.

iii) NEURAL NETWORK:
Neural Network it is one of the mathematical model neural network are used for various tasks, including predictive modelling,adaptive control, and solving problem in artificial intelligence. Neural network is the copy of brain and showing output it is type of machine learning and inspired to human brain. for example-ChatGpt, Lama it is very large amount of data. The basic of neural network is neurons (node), layers, connections, activation function.

iv) NATURAL LANUAGE PROCESSING (NPL):
Natural language processing (NPL) is a field of computer science and a subfield of artificial intelligence that aims to make computers understand human language. Natural language processing uses computational linguistics which is the study of how language work and various models based on statistics machine learning and deep learning. The natural language processing powers many application that use language such as text translation voice recognition, text summarization and Chabot's, such as GPS system.

v) KNOWLEDGE BASED SYSTEM:
A Knowledge based System (KBS)is a type of computers system that analyses knowledge, data and other information from sources to generate new knowledge, it uses Artificial intelligence concepts to solve problems, which may be useful for assisting with human learning and making decisions. Knowledge bases system typically have three components which include knowledge base, interface engine, user interface.

3.2 APPLICATION OF AI:
Artificial intelligence has various application in today'ssociety for today time because it can solve many problem, with efficient way transport, Agriculture, finance, data security, etc.
Following are some sectors which have the application of Artificial Intelligence:

Fig. Ref image on site -https://www.javatpoint.com/application-of-ai

1)AI IN HEALTHCARE:
AI is also playing an increasingly important role in healthcare. AI-powered tools can help doctors diagnose diseases, develop new treatments, and provide personalized care to patients.

2)AI IN TRANSPORT:
AI is becoming highly demanding for travel industries. AI is capable of doing various travel related works such as from making travel arrangement to suggesting the hotels, flights, and best routes to the customers. Travel industries are using AI-powered Chabot's which can make human-like interaction with customers for better and fast response.

3)AI INAGRICLTURE:
Agriculture is an area which requires various resources, labour, money, and time for best result. Now a day's agriculture is becoming digital, and AI is emerging in this field. Agriculture is applying AI as agriculture robotics, solid and crop monitoring, predictive analysis. AI in agriculture can be very helpful for farmers.

4)AI IN EDUCATION:
AI could be used in education to personalize learning, improve student engagement, and automate administrative tasks for schools and other organizations.

5) AIIN E-COMMERCE:
AI is providing a competitive edge to the e-commerce industry, and it is becoming more demanding in the e-commerce business. AI is helping shoppers to discover associated products with recommended size, colour, or even brand.

6) AI IN ROBOTICS:
Artificial Intelligence has a remarkable role in Robotics. Usually, general robots are programmed such that they can perform some repetitive task, but with the help of AI, we can create intelligent robots which can perform tasks with their own experiences without pre-programmed. o Humanoid Robots are best examples for AI in robotics, recently the intelligent Humanoid robot named as Erica and Sophia has been developed which can talk and behave like humans.

7) AIIN SOCIAL MEDIA:
Social Media sites such as Facebook, Twitter, and Snapchat contain billions of user profiles, which need to be stored and managed in a very efficient way. AI can organize and manage massive amounts of data. AI can analyze lots of data to identify the latest trends, hashtag, and requirement of different users.

8) AI IN DATA SECURITY:
The security of data is crucial for every company and cyber-attacks are growing very rapidly in the digital world. AI can be used to make your data more safe and secure. Some examples such as AEG bot, AI Platform, are used to determine software bug and cyber-attacks in a better way.

9) AI IN FINANCE:
AI and finance industries are the best matches for each other. The finance industry is implementing automation, chatbot, adaptive intelligence, algorithm trading, and machine learning into financial processes.

10) AI IN AUTOMOTIVE:
Some Automotive industries are using AI to provide virtual assistant to their user for better performance. Such as Tesla has introduced TeslaBot, an intelligent virtual assistant. Various Industries are currently working for developing self-driven cars which can make your journey more safe and secure.

11)AI IN GAMING:
AI in gaming refer to the use of artificial intelligence, computer vision and machine learning algorithms to enhance various aspects of video game and adaptive to player's skills and preferences.

3.3 FUTURE OF AI:

The future of artificial intelligence is likely to be shaped by a combination of technological advancements, increased investment, and changing societal attitudes towards the technology.
One of the most important significant arears of growth for artificial intelligences is expected to be in the field of machine learning. Artificial intelligence eliminated dull and boring tasks comparing to other technologies but it's solve the large problem vary efficient way any data ingestion, imitates human cognition,futuristic, prevent natural disasters, facial recognition and catboats this all are the developed by artificial intelligence.

RESEARCH METHODOLOGY

The methodology section outline the plan and method that how the study is conducted. This includes Universe of the study, sample of the study,Data and Sources of Data, study's variables and analytical framework. The detailsare as follows;

3.1 ADVANTAGES OF AI:

- Impact on the job Market.
- Healthcare and Medicine.
- Banking and Finance Industry.
- Transportation Industry.
- Improved Efficiency and productivity.
- Enhancing Customer Experience.
- Manufacturing Industry.
- Customer Service Industry.
- Entertainment Industry.

3.2 Data and Sources of Data

AI is transforming society and culture in numerous ways, from healthcare to entertainment, AI is changing the way we live, work and with each other in this essay, wewill explore the impact of AI on society and culture including its benefits and challenges ,ethical considerations , and future implications. In healthcare AI can be used to diagnose diseases, develop personalized treatment plans, and improve patient outcomes, in interment AI can be used to create immersive experiences, such as virtual reality and augmented reality, additionally. , AI has the potential to improve efficiency and productivity in various industries.

3.3 Conclusion

In This article we are discussed in brief about artificial intelligence,we have discussed some method of AI, its achievement and uses of AI etc. , AI is solve major problem of many fields and many level of problems its helpful for now days and next generations. And it's very high technologies comparing other technologies. Andit well change computer science and scenario of the world.

3.4.1 Descriptive Statistics

Descriptive Statics has been used to find the maximum, minimum, standard deviation, mean and normally distribution of the data of all the variables of the study. Normal distribution of data shows the sensitivity of the variables towards the periodic changes and speculation. When the data is not normally distributed it means that the data is sensitive towards periodic changes and speculations which create the chances of arbitrage and the investors have the chance to earn above the normal profit. But the assumption of the APT is that there should not be arbitrage in the market and the investors can earn only normal profit. Jarquebera test is used to test the normality of data.

3.4.2 References

1. https://www.javatpoint.com/artificial-intelligence-ai.
2. https://www.ibm.com/think/insights/artificial-intelligence-advantages-disadvantages.
3. https://www.w3schools.com/ai/ai_whatis.asp.
4. https://www.ibm.com/topics/neural-networks.
5. https://www.javatpoint.com/application-of-ai
6. https://www.coursera.org/articles/what-is-artificial-intelligence.
7. https://www.datacamp.com/blog/what-is-machine-learning.
8. https://pianalytix.com/difference-between-machine-learning-data-science-artificial-intelligence-deep-learning/