

Artificial Intelligence Applications in day today life

Prof. Drakshayini

Assistant Professor International Institute of Business Studies.

Muthugadahalli, Bengalure-57

Abstract

Artificial intelligence (AI) is taking on an increasingly important role in our society today. In the early days, machines fulfilled only manual activities. Nowadays, these machines extend their capabilities to cognitive tasks as well. And now AI is poised to make a huge contribution various fields. The term AI can also be applied to any machine that exhibits traits related to a person's mind like learning and problem-solving. A lot of development has been made in the field of Artificial Intelligence and the progress can be seen.

AI is a dynamic tool used across industries for better decision making, increasing efficiency and eliminating repetitive work.

Here we have some of the Artificial Intelligence Applications in real world.

Artificial Intelligence Applications

1. Healthcare

One of the foremost deep-lying impacts which AI has created is within the Healthcare space. A device, as common as a Fitbit or an iWatch, collects a lot of data like the sleep patterns of the individual, the calories burnt by him, heart rate and a lot more which can help with early detection, personalization, even disease diagnosis. This device, when powered with AI can easily monitor and notify abnormal trends. This can even schedule a visit to the closest Doctor by itself and therefore, it's also of great help to the doctors who can get help in making decisions and research with AI. It has been used to predict ICU transfers, improve clinical workflows and even pinpoint a patient's risk of hospital-acquired infections. One of the major use cases of AI application in healthcare. Multiple diagnoses rely on different imaging techniques like MRI, CT scan, PET scan, X-ray, etc. Trained radiologists diagnose such conditions (or absence of it) based on the image data and their expertise.

2. Automobile

At this stage where automobiles changing from an engine with a chassis around it to a software-controlled intelligent machine, the role of AI cannot be underestimated.

The goal of self-driving cars, during which Autopilot by Tesla has been the frontrunner, takes up data from all the Tesla's running on the road and uses it in machine learning algorithms. The assessment of both chips is later matched by the system and followed if the input from both is the same.

AI are often witnesses working its magic through robots producing the initial nuts and bolts of a vehicle or in an autonomous car using machine learning and vision to securely make its way through traffic. And also it will be analyzing map for proper directions and it will be calculating distance between the vehicles using sensors that are mounted on vehicle for safe driving.

3. Banking and Finance

One of the early adopter of Artificial Intelligence is the Banking and Finance Industry. From Chabot offered by banks. AI provides Securities for autonomous, high-frequency trading, the uses are innumerable. Features like AI bots, digital payment advisers and biometric fraud detection mechanisms cause higher quality of services to a wider customer base. The adoption of AI in banking is constant to rework companies within the industry, provide greater levels useful and more personalized experiences to their customers reduce risks as well as increase opportunities involving financial engines of our modern economy.

4. Surveillance

AI has made it possible to develop face recognition Tools which may be used for surveillance and security purposes.

As a result, this empowers the systems to monitor the footage in real-time and can be a path breaking development in regards to public safety. Manual monitoring of a CCTV camera requires constant human intervention so they're prone to errors and fatigue. AI-based surveillance is automated and works 24/7, providing real-time insights. According to a report by the Carnegie Endowment for International Peace, a minimum of 75 out of the 176 countries are using AI tools for surveillance purposes. Across the country, 400 million CCTV cameras are already in situ, powered by AI technologies, primarily face recognition.

5. Social Media

All of us love Social Media, don't we?

Social Media is not just a platform for networking and expressing oneself. It subconsciously shapes our choices, ideologies, and temperament. All this due to the synthetic Intelligence tools which work silently within the background, showing us posts that we "might" like and advertising products that "might" be useful based on our search and browsing history.

For example, recently Instagram revealed how it's been using AI to customize content for the Explore Tab. This helps with social media advertising because of it's unprecedented ability to run paid ads to platform users based on highly granular demographic and behavioral targeting. Did you know, we also have AI tools that will actually write Facebook and Instagram ads for us? Another huge benefit of AI in social media is that it allows marketers to analyze and track every step that they take.

6. Entertainment

With the arrival of online streaming services like Netflix and Amazon Prime, various OTT platforms relies heavily on the information collected by the users.

This helps with recommendations based upon the previously viewed content. This is done not only to deliver accurate suggestions but also to create content that would be liked by a majority

of the viewers.

With new contents several videos are being created every minute, it is very difficult to classify the huge data and making them easier to search. AI tools analyze the contents of videos frame by frame and

identify objects to feature appropriate tags. AI is additionally helping media companies to form strategic decisions.

7. Education

In the education sector also, there are a number of problems which will be solved by the implementation of AI .A few of them being automated marking software, content retention techniques and suggesting improvements that are required.

This can help the teachers monitor not just the academic but also the psychological, mental and physical well being of the students but also their all-round development. This would also help in extending the reach of education to areas where quality educators can't be present physically.AI also help student and teacher in research and enhancing their learning abilities based on their interest.

8. Space Exploration

AI systems are being developed to scale back the danger of human life that venture into the vast realms of the undiscovered and unrelieved universe which is a very risky task that the astronauts need to take up.

As a result, unmanned space exploration missions just like the Mars Rover are possible due to the utilization of AI. It has helped us discover numerous stars, galaxies, and more recently, two new planets in our very own system.

Many space research organizations are also working with AI applications for space exploration to automatic image analysis and to develop autonomous spacecraft that would avoid space debris without human intervention, create communication networks more efficient and distortion-free by using an AI-based device.

9. Gaming

Computer game Systems powered by AI is ushering us into a replacement era of immersive experience in gaming.AI is employed to get responsive, adaptive or intelligent behaviors primarily in non-player characters (NPCs) almost like human-like intelligence in video games. It serves to enhance the game-player experience instead of machine learning or deciding.

AI has also been playing a huge role in creating video games and making it more tailored to players' preferences.

10. Robotics

With increasing developments within the field of AI, robots are becoming more efficient in performing tasks that earlier were too complex. The idea of complete automation are often realized only with the assistance of AI, where the system can't just perform the specified task but also monitor, inspect and improve them without any human intervention.AI in robotics helps the robots to learn the processes and perform the tasks with complete autonomy, without any human intervention. This is because robots are designed to perform repetitive tasks with utmost precision and increased speed.

AI has been introducing flexibility and learning capabilities in previously rigid applications of robots. These benefits are expected to reinforce the market growth.

11. Agriculture

Artificial Intelligence is changing the way we do one among our most primitive and basic professions which is farming. The uses of AI in agriculture are often attributed to agriculture

robots, predictive analysis, and crop and soil monitoring. In addition, drones are also used for spraying insecticides and detecting weed formation in large farms. This is getting to help firms like Blue River Technologies, better manage the farms. AI has also enhanced crop production and

improved real-time monitoring, harvesting, processing and marketing.

12. E-Commerce

This is one of the Artificial Intelligence Applications that's found to be widely used. Different departments of E-commerce including logistics, predicting demand, intelligent marketing, better personalization, use of chatbots, etc. are being disrupted by AI. The E-Commerce industry, a prominent player being Amazon is one among the primary industries to embrace AI. This may experience a good use of AI with time. E-commerce retailers are increasingly turning towards chatbots or digital assistants to supply 24×7 support to their online buyers. Built using AI technologies, chatbots are becoming more intuitive and are enabling a far better customer experience.

13. Construction industry

AI can improve designs overall to make spaces better for its ultimate human end users. The workspace startup used AI to help understand and predict the frequency of use for these meeting rooms, and the company was able to design the space to best fit the needs of the people before starting construction on it. The benefits of AI in design do not end here. AI can also help workers figure out mistakes and omissions that might be present in the design before going forward with building. One of the truly amazing things about AI is that it can figure out risks before they happen. This helps humans identify risks and figure out how to prevent problems from arising. AI can identify risks, measure their impact and use predictive analytics to help you reduce risks. Beyond design and construction, machine learning can even be instrumental in facility management to extend the total lifecycle of an asset. In general, there are often gaps in important information in facility management. As a result, it's difficult to efficiently and cost-effectively manage repairs and renovations on site.

Summary

To conclude, we've seen AI Applications in various domains. There are a number of industries which are on the verge of transformation by AI. Let's just wait and watch how AI would disrupt different industries. As a result, this may transform the character of labor and therefore the workplace. AI has become more user-friendly, and more research groups are adapting AI models for various purposes. And the awareness about AI must increase as well.

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