Commentary

Modern Innovations in Artificial Intelligence for Agriculture Sector Developments

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DESCRIPTION

Artificial intelligence is based on the idea that human intelligence can be described in such a way that a computer can simply imitate it and perform tasks ranging from the simple to sophisticated. Artificial intelligence intends to optimize learning, reasoning, and perception.

Some examples include vision-recognition systems in self-driving cars, recommendation engines that suggest alternatives you might like based on earlier purchase, and speech and language recognition in the Apple iPhone's Siri virtual assistant.

AI is having a significant impact across the industry. Every industry is seeking to deploy intelligent machinery to automate certain operations. And all you need is a good Artificial Intelligence to break into any sector. Even in the agriculture industry!

Agriculture and farming are one of the oldest and most widespread occupations on the globe.

This article discusses about the difficulties farmers experience while utilising traditional agricultural methods, as well as how Artificial Intelligence is revolutionising agriculture by replacing inefficient methods with more effective.

Applications of artificial intelligence in agriculture

Artificial Intelligence (AI) is being used by the agriculture industry to help produce healthier crops, control pests, monitor soil and growing conditions, organize information for farmers, reduce inventory, and improve a wide range of agriculture-related activities along the food supply chain.

Drones for crop health assessment: SkySqurrel Technologies has introduced drone-based Ariel imaging technology for agricultural health monitoring. In this method, the drone collects data from fields, which is consequently transferred to a computer via USB drive and examined by experts.

This company analyses the taken imagery with algorithms and provides a full report on the farm's current health. It aids farmers in identifying pests and bacteria, helping them to deploy pest management and other ways in a timely manner.

Agricultural robotics: AI firms are working on robots that can perform a variety of activities in farming fields. This kind of robot is trained to suppress weeds and harvest crops at a faster rate with greater volume than humans.

These robots are designed to examine crop quality and detect weeds while picking and packing crops at the same time. These robots can also deal with the difficulties that agricultural manpower faces.

A system that uses artificial intelligence to detect pests: Pests are one of the most destructive enemies of farmers' crops. AI systems analyze satellite photographs and compare them to previous data to determine whether any insects have landed and if so, which species of insect has landed (locust, grasshopper, etc.) and send notifications to farmers' smartphones so that they can take the necessary measures and employ the necessary pest management, allowing AI to assist farmers in their pest control efforts.

CONCLUSION

In agriculture, artificial intelligence not only aids farmers in automating their operations, but also improves to precise cultivation for higher crop output and quality while using fewer resources.

Companies that develop machine learning or AI-based products or services, such as agricultural training data, drones, and automated machine production, will gain from future technological advancements. This will help the world in coping with food production challenges as the world population increases.

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