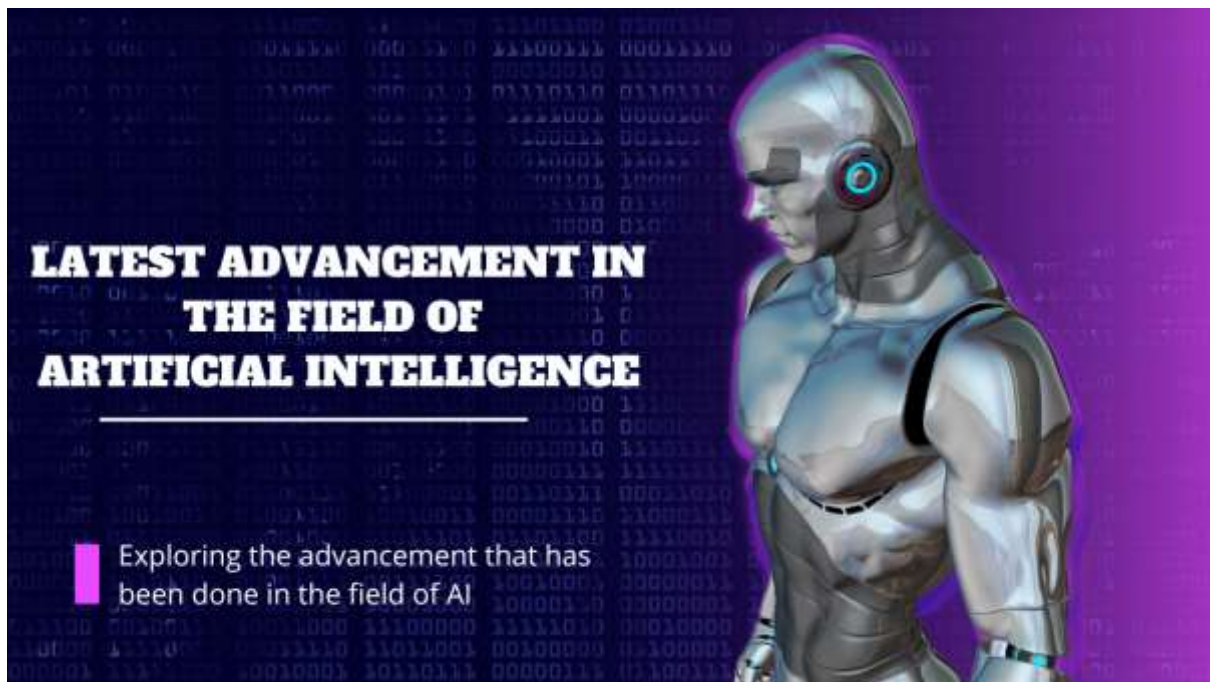# Latest Advancement in the field of AI

Introduction:

In the past three years, Artificial Intelligence (AI) has made impressive progress in every field. For which, advancements have been made to make it more expanding and impactful. From industries to solving complex problems, artificial intelligence did it all. To know more about it, let's explore what's the world of AI and the advancements done in it.

Advancement in the field of AI:

NLP (Natural Language Processing):

The NLP refers to Natural Language Processing. It enables the machine/ computers to understand the human language. Nowadays it's being used in a variety of products or services, like voice assistants, translation apps to translate foreign languages, search results, autocorrect, and many more.

Computer Vision:

As the name suggests, artificial intelligence allows the computer to visualize and analyze all kinds of visual data in the real world. It could be a photo or video. It involves a variety of computer vision like, facial recognition, image or photo segmentation, object & pattern detection, and feature matching.

Image Source- Cognito

Machine Learning:

Machine learning comes under AI, which only focuses on data and [algorithms](#). It is basically used to develop algorithms and study data patterns and relations between data. Moreover, it's becoming very powerful day by day as it's solving real-time problems, like, disease prevention models, weather [prediction](#) models, and maps.

Image Source- Emeritus

Deep learning:

Deep learning is also known as the "brain" of AI. It's the [subfield](#) or the advanced field of artificial intelligence because it's used in big data analytics, like government data sources or any big organization data source. It works more efficiently in comparison to machine learning as it's required to store large or big data.

Biometrics:

 It is a unique way of identifying and verifying a person on the basis of his or her biological traits. This technology is profoundly preferred by Intelligent agencies for security in the system to prevent cybercrime, terrorism, etc. For this, strong algorithms are being used so that it will work more efficiently.

The biometrics is divided into two kinds-

1. **Psychological characteristic**- In this, facial recognition, and fingerprint scanning are used for setting security. And retina/ iris recognition is only for high security.
2. **Behavior Characteristic**- Here, voice recognition and typing rhythms are often settled down for security.

Image Source- Eralnnova

Email-filtering:

The email-filtering is done to keep the emails in an organized way. In other words, it detects spam or false data that may harm the user. So, it keeps away such types of data from the safe folder.

Chatbot:

The [chatbot](#) is an artificial intelligence, that programs data to provide human-like conversation with the user, for example- Google Assistant, Alexa and Siri. It is also used in social media platforms like WhatsApp messages, and YouTube's voice search. It is often seen in e-commerce platforms like Flipkart, where the chatbot asks you queries and other things.

Image Source- Cyfuture

Conclusion:

Finally, it's clear that artificial intelligence is much more about what we think and what we see. Looking at its progress, AI has greatly influenced our work and our lifestyle. Moreover, its expansion is giving a clear signal that artificial intelligence is going to take over humans and rule the world in the future.