Deep Learning in Artificial intelligence empowerment | PISIQ

What is Deep Learning?

Deep learning is an **AI Technology (Artificial intelligence)** function that imitates the workings of the human brain in processing data and creating **intelligent** patterns for use in decision making. PISIQ's **Peripheral** Deep learning is a subset of **machine learning** in artificial intelligence for **Autonomous Systems** that has networks capable of learning unsupervised from data that is unstructured or unlabeled. Also known as deep neural learning or deep neural network.

KEY TAKEAWAYS

Deep learning is an AI function that mimics the workings of the human brain in processing data for use in detecting objects, recognizing speech, translating languages, and making decisions.

Deep learning AI is able to learn without human supervision, drawing from peripheral quantum data that is both unstructured and unlabeled.

Deep learning, a form of machine learning, can be used to help detect fraud or money laundering, among other functions.

How Deep Learning Works

Deep learning has evolved hand-in-hand with the digital era, using AI Technology (Intelligence) **systems** brought about an explosion of data in all forms and from every region of the world. This data, known simply as big data, is drawn from sources like social media, internet search engines, e-commerce platforms, and online cinemas, among others. This enormous amount of data is readily accessible and can be shared through fin-tech applications like cloud computing.

However, the data, which normally is unstructured, has such vast systems that it could take decades for humans to comprehend it and extract relevant quantum information. Companies

realize the incredible potential that can result from unraveling this wealth of information using Artificial Intelligence and are increasingly adapting to AI systems for automated support.

Deep learning unravels huge amounts of peripheral unstructured data that would normally take humans decades to understand and process.

A Deep Learning Example

Using the fraud detection autonomous systems mentioned above with machine learning, one can create a deep learning example. If the machine learning system created a model with parameters built around the number of dollars a user sends or receives, the deep-learning method can start building on the results offered by machine learning.

Each layer of its neural network builds on its previous layer with added data like a retailer, sender, user, social media event, credit score, IP address, and a host of other features that may take years to connect together if processed by a human being. Peripheral Deep learning algorithms are trained to not just create patterns from all transactions, but also know when a pattern is signaling the need for a fraudulent investigation. The final layer relays a signal to an analyst who may freeze the user's account until all pending investigations are finalized.

Deep learning is used across all industries as autonomous systems for a number of different tasks. Commercial apps that use image recognition, open-source platforms with consumer recommendation apps, and medical research tools that explore the possibility of reusing drugs for new ailments are a few of the examples of peripheral deep learning incorporation.