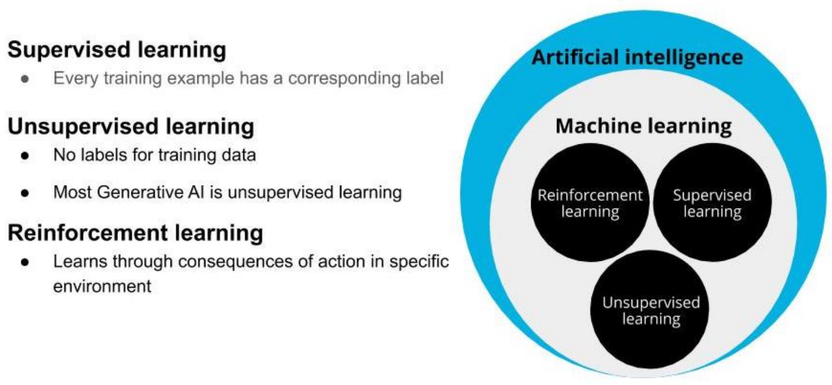
Machine Learning Techniques

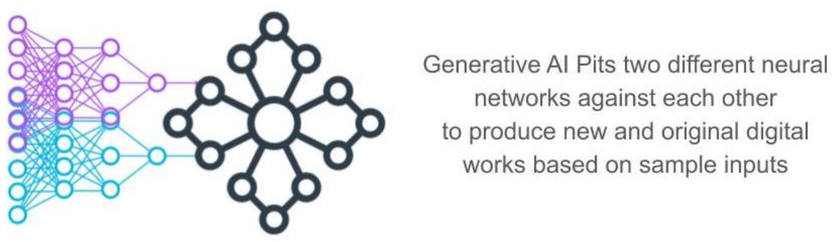
1. **Supervised Learning:** Models are presented wit input data and the desired results. The model will then attempt to learn rules that map the input data to the desired results.
2. **Unsupervised Learning:** Models are presented with datasets that have no labels or predefined patterns, and the model will attempt to infer the underlying structures from the dataset. Generative AI is a type of unsupervised learning.
3. **Reinforcement learning:** The model or agent will interact with a dynamic world to achieve a certain goal. The dynamic world will reward or punish the agent based on its actions. Overtime, the agent will learn to navigate the dynamic world and accomplish its goal(s) based on the rewards and punishments that it has received.



Types of Machine Learning

Generative AI

Generative AI is one of the biggest recent advancements in artificial intelligence technology because of its ability to create something new. It opens the door to an entire world of possibilities for human and computer creativity, with practical applications emerging across industries, from turning sketches into images for accelerated product development, to improving computer-aided design of complex objects. It takes two neural networks against each other to produce new and original digital works based on sample inputs.



Generative AI Opens the Door to Possibilities

QUESTION 1 OF 2

Generative AI is usually an example of which type of Machine Learning?

- ✓ Unsupervised Learning
- Supervised Learning
- Reinforcement Learning

SUBMIT

Think Like a Machine Learning Engineer ✓

We learned about how Airbus, NASA JPL and Glidewell Dental are using Generative AI. Can you think of other projects where Generative AI would be helpful?

Your reflection
None

Things to think about
There is no right or wrong answer here. The future of Generative AI is limited only by our imagination. As you go through the course, keep thinking of new ways to use this powerful technology!

Additional Resources

- AWS DeepLens

NEXT