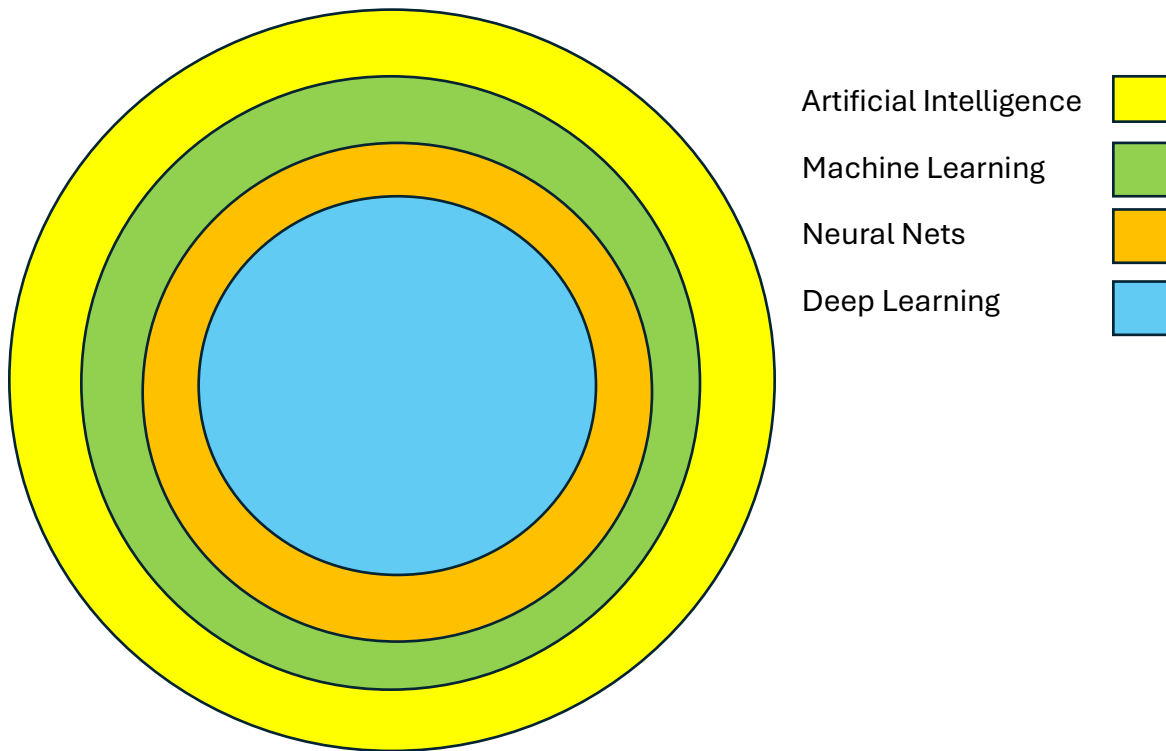


AI Overview



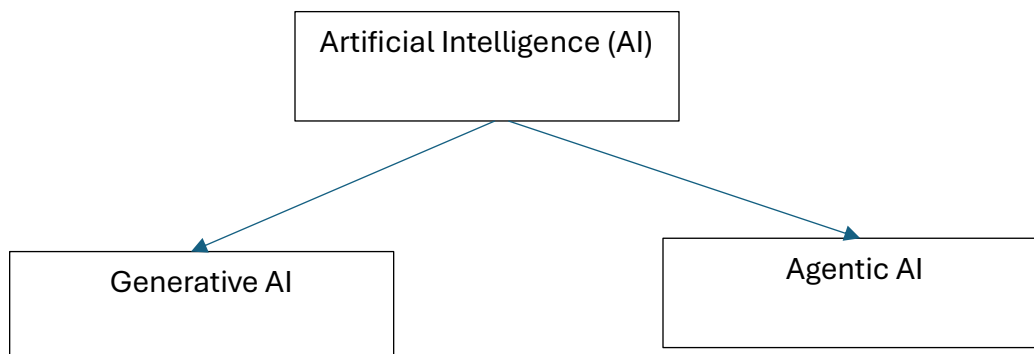
Artificial Intelligence (AI) - is the capability of computational systems to perform tasks usually performed with human intelligence such as learning, reasoning, problem-solving, perception and decision-making.

Machine Learning – Enables computers to learn from data.

Neural Nets – Computational models with interconnected neurons.

Deep Learning – Neural networks with multiple layers for hierarchical representation learning.

AI includes two major paradigms namely the below: -



Generative AI – AI models that create new content based on training data.

Agentic AI – AI models that act as autonomous agents capable of making decisions to achieve specific goals.

Differences between Generative AI and Agentic AI are: -

Feature	Generative AI	Agentic AI
Preferred use-case	Create content based on input	Execute tasks autonomously based on defined goals.
Key Input Key Output	Prompts Text, images, code, video	Goals Plans, actions, decisions
Mode of Learning	Designed to learn through pattern and structure recognition.	Designed to learn and evolve through interactions.
Autonomy	Less autonomous and reacts to user input	Highly independent
Human Interaction Level	One-time response to prompts	Ongoing interactions and iteration
Memory used	Limited or none	Persistent state and memory
Decision-Making Patterns	Makes decisions based on input patterns	Independent decision making
Deployment Speed	Fast plug-and-play with immediate surface value.	Moderate involving workflow mapping.
Examples	ChatGPT, Midjourney	AutoGPT, Meta's CICERO

Generative AI is preferred in the following scenarios: -

- 1) Creating large volumes of
 - a. Text
 - b. Code
 - c. Images
 - d. Video
- 2) Task is either
 - a. Single-step
 - b. Prompt-driven
- 3) Accuracy can be validated/revised by humans.
- 4) Human-in-the-loop workflows are sufficient.

Agentic AI is preferred in the following scenarios: -

- 1) Tasks involve goal planning and execution over time.
- 2) AI initiation of actions or manage projects is required.
- 3) Decisions require context from past interactions.