Demystifying Terminology

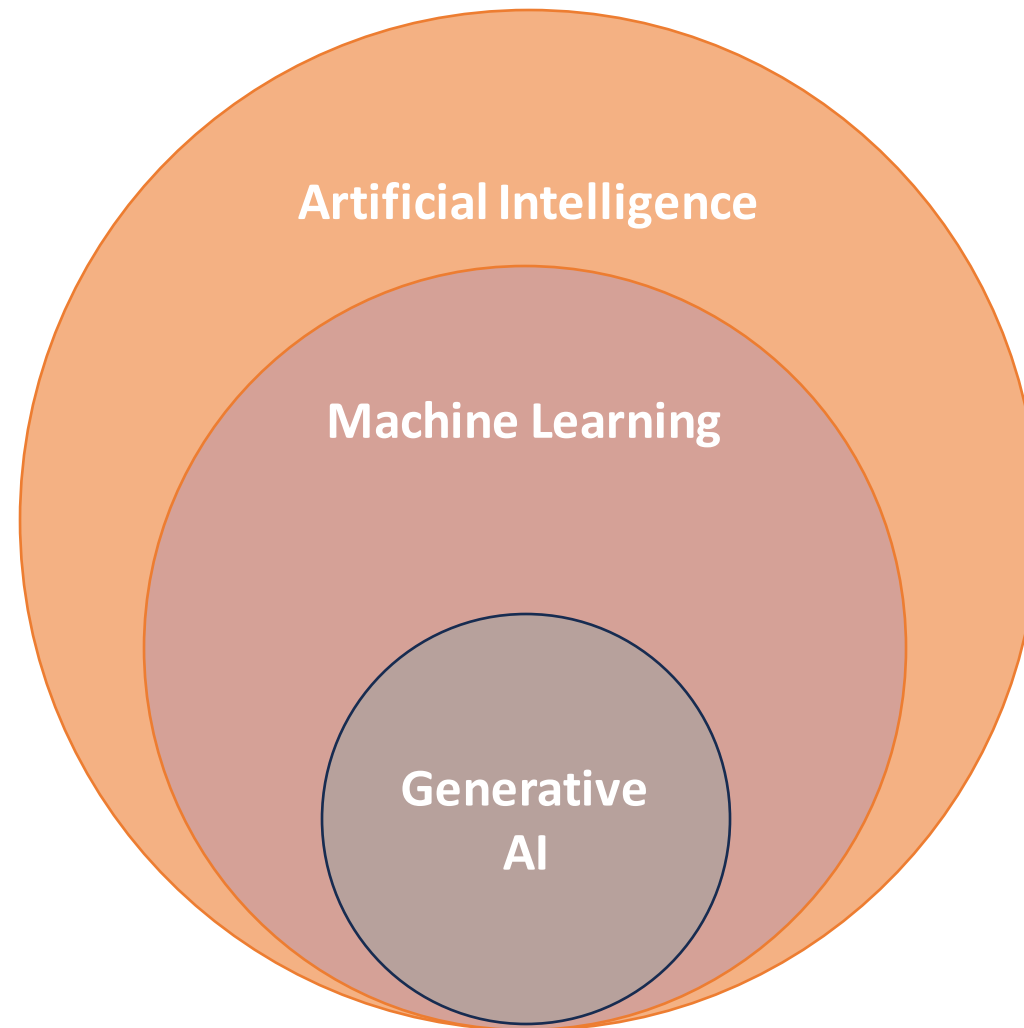**Artificial Intelligence**

Machine Learning

Generative AI

Artificial Intelligence

Credits: SAS

1950s–1970s
Neural Networks

Early work with neural networks stirs excitement for "thinking machines."

1980s–2010s
Machine Learning

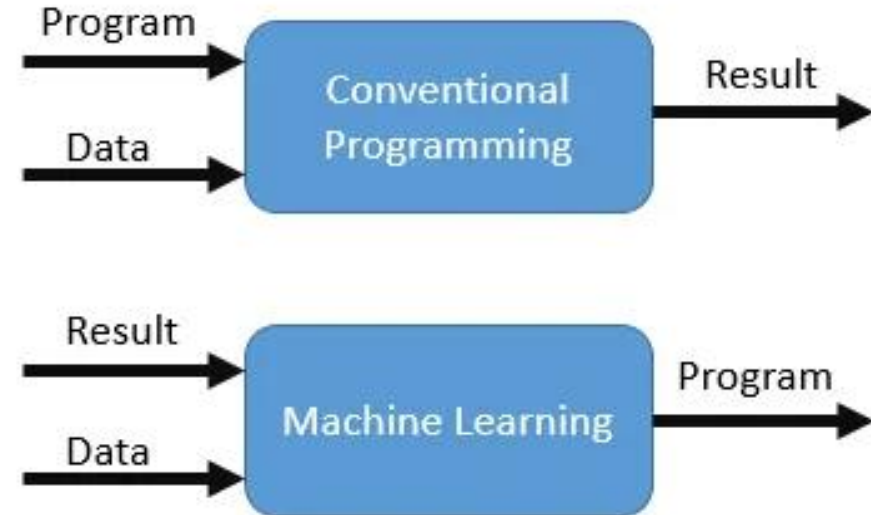Machine learning becomes popular.

Present Day
Deep Learning

Deep learning breakthroughs drive AI boom.

Wikipedia: Artificial Intelligence is the ability of machines to perform tasks that are typically associated with human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.

Machine Learning

Machine Learning is the ability to learn from new data without giving explicit instructions.

Image Credits: ai.plainenglish.io

Generative artificial intelligence (AI)

- **Generative AI means a model designed to reproduce and interpolate from a given input**
  - Images: DALL-E 2 (Open AI), Midjourney, Stable Diffusion
  - Audio and voice: Audiocraft, VALL-E
  - Video: various
  - Text: ChatGPT (OpenAI), Bard (Google), Sydney (Bing)
- **Conversational AI**
  - A large language model fine-tuned with reinforcement learning to generate specific types of responses one might find in a human-human interaction (e.g., ChatGPT, Bard, Sydney)

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