

# Generative AI - Overview

Generative AI refers to a type of artificial intelligence that can create new content, such as text, images, music, or other forms of media, based on the patterns it has learned from existing data.

It uses deep learning models, like Generative Adversarial Networks (GANs) or transformers (e.g., GPT), to generate new outputs that mimic the style or structure of the input data.

Generative AI is used in various fields, including:

- Creative arts (e.g., writing, music, visual art)
- Healthcare (e.g., drug discovery, medical imaging)
- Automation (e.g., code generation, content creation)

Examples of generative AI applications:

1. Text generation tools (e.g., GPT) can write essays, stories, or even code.
2. Image generation models (e.g., DALL-E) create artwork based on textual descriptions.

Generative AI is transforming industries and enabling new creative possibilities, making it a highly versatile technology with the potential for significant societal impact.