

Term	Real-World Example	Why It Illustrates the Concept
AI	A smart speaker (e.g., Alexa) that can answer “What’s the weather?” and play music on command.	Combines speech recognition, language understanding, and decision rules. All under the big “AI” roof.
Classical ML	Spam detection in email: you manually label certain emails as “spam” or “not spam.”	The ML model learns from those labels and then filters new incoming mail. It’s ML if it learns patterns rather than you writing explicit “contains ‘offer’ → mark spam” rules.
Deep Learning	Face-unlock on smartphones: You simply hold the phone up to your face, and it unlocks because it has learned to recognize your face from many selfies.	Under the hood, a convolutional neural network has learned intricate features of your face (pixels → edges → eyes → entire face). It wasn’t manually coded.
Generative AI (GenAI)	Chatbots like ChatGPT that can write a poem, code snippet, or an email draft based on your prompt.	The model was trained on massive text data; now it can generate new, coherent text that “sounds” human. It’s creative generation.