

# Sample

Artificial Intelligence (AI) is a branch of computer science that aims to create machines capable of intelligent behavior. AI systems can perform tasks such as learning, reasoning, problem-solving, and natural language understanding.

Machine Learning (ML), a subset of AI, involves training algorithms on data to make predictions or decisions without explicit programming. Common ML algorithms include linear regression, decision trees, and neural networks.

Deep Learning, a further subset of ML, uses multi-layered neural networks to model complex patterns in data. It is widely used in image recognition, natural language processing, and autonomous vehicles.

RAG (Retrieval-Augmented Generation) is a powerful technique combining retrieval of relevant documents from a knowledge base with generative models to produce informed and grounded responses.