

Artificial Intelligence (AI) refers to the development of computer systems capable of performing tasks that typically require human intelligence. These tasks include reasoning, learning, perception, language understanding, and decision-making. AI systems are designed to analyze data, recognize patterns, and make predictions or recommendations.

AI can be broadly categorized into narrow AI and general AI. Narrow AI is designed to perform specific tasks such as speech recognition or image classification. Most AI systems in use today fall into this category. General AI, which would possess human-like cognitive abilities across a wide range of tasks, remains a theoretical concept.

Key techniques in AI include machine learning, deep learning, and natural language processing. Deep learning uses neural networks with multiple layers to process complex data such as images and speech. Natural language processing enables machines to understand and generate human language.

AI applications span numerous industries. In healthcare, AI assists in medical imaging and diagnosis. In finance, it supports fraud detection and algorithmic trading. Ethical concerns related to bias, transparency, and accountability are central to ongoing AI research and policy discussions.