

Title: AI Fundamentals: A Quick Review Artificial intelligence (AI) is the simulation of human intelligence processes by machines, especially computer systems. These processes include learning, reasoning, and self-correction. Subfields: 1. Machine Learning (ML): The core of modern AI. It enables systems to automatically learn and improve from experience without being explicitly programmed. 2. Natural Language Processing (NLP): Focuses on the interaction between computers and human language. 3. Computer Vision: Deals with enabling computers to see, identify, and process images and video. The Turing Test, proposed by Alan Turing, remains a key concept for determining if a machine exhibits intelligent behavior equivalent to, or indistinguishable from, a human. Key Concept: The Vanishing Gradient Problem historically slowed deep learning by making it hard for neural networks to learn from input data deep in the network structure.