

Title: Introduction to Artificial Intelligence

Section 1: What is AI?

Artificial Intelligence (AI) is the simulation of human intelligence in machines that are programmed to think like humans and mimic their actions. Key areas include machine learning, natural language processing, and computer vision.

Section 2: Machine Learning

Machine learning is a subset of AI that enables systems to learn from data and improve over time without being explicitly programmed. Common algorithms include regression, classification, and clustering.

Section 3: Generative AI

Generative AI refers to models that can create new content, such as text, images, or code. Examples include large language models like GPT and image generators like DALL·E.

Section 4: Applications

AI is used in healthcare (diagnosis and treatment recommendations), finance (fraud detection, stock prediction), and customer service (chatbots).

Section 5: Ethics and Responsibility

Responsible AI practices ensure fairness, transparency, and accountability. Bias mitigation, data privacy, and explainability are critical considerations.