

# Artificial Intelligence and Machine Learning

## A Comprehensive Overview

Artificial Intelligence (AI) represents one of the most significant technological advancements of the modern era. It encompasses various subfields including machine learning, natural language processing, computer vision, and robotics.

Machine Learning is a subset of AI that focuses on algorithms that can learn and make decisions from data without explicit programming. Common types include supervised learning, unsupervised learning, and reinforcement learning.

Applications of AI include autonomous vehicles, medical diagnosis, recommendation systems, and virtual assistants. The future of AI holds great promise for solving complex global challenges in healthcare, climate change, and education.