

Machine Learning is a subfield of Artificial Intelligence that focuses on algorithms that improve through experience.

There are three main types of machine learning: supervised learning, unsupervised learning, and reinforcement learning.

Supervised learning involves training a model on labeled data, like predicting house prices based on features.

Unsupervised learning identifies patterns in data without labels, such as customer segmentation using clustering.

Reinforcement learning involves an agent learning to take actions in an environment to maximize cumulative reward.

Key concepts in machine learning include overfitting, underfitting, model evaluation metrics, and feature engineering.

One common algorithm used in supervised learning is the decision tree, which splits data based on features to make predictions.