Textbook: Introduction to Machine Learning

Machine learning is a branch of artificial intelligence (AI) focused on building systems that can learn from data. It involves algorithms that improve automatically through experience.

# Supervised Learning

Supervised learning uses labeled data to train models. Examples include Linear Regression, Logistic Regression, and Support Vector Machines (SVM).

# Unsupervised Learning

Unsupervised learning works with unlabeled data. Examples include K-means Clustering and Principal Component Analysis (PCA).