

Machine Learning Algorithms – Summary

	Why It Is Used	What It Does	Example Applications
ed (Regression)	Simple & interpretable	Predicts continuous values	House price, Sales forecasting
ed (Classification)	Efficient probability model	Predicts categorical outcomes	Disease diagnosis, Spam detection
ed	Easy to understand	Rule-based splitting	Medical diagnosis, Credit scoring
ed (Ensemble)	High accuracy & robust	Combines multiple decision trees	Fraud detection, Stock prediction
ed	Simple & intuitive	Predicts based on nearest neighbors	Image recognition, Pattern recognition
ed	Effective in high dimensions	Finds optimal separating hyperplane	Face recognition, Text classification
vised (Clustering)	Fast clustering	Groups similar data points	Customer segmentation, Market research
vised (Dimensionality Reduction)	Reduces complexity	Extracts principal components	Data visualization, Feature selection