

3.2 ML model selection

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ML Model Selection Guidelines

Algorithm	Decision Making or prediction speed	Memory Usage	Required Tuning	Generalized Assessment
Regression and Linear SVM	Fast	Small	Minimal	Good for small problems with linear decision boundaries
Decision Trees	Fast	Small	Some	Good generalist, but prone to overfitting
Non-linear SVM and Regression	Slow	Medium	Some	Good for many binary problems, and handles high-dimensional data well
Nearest Neighbour	Moderate	Medium	Minimal	Lower accuracy, but easy to use and interpret
Naïve Bayes	Fast	Medium	Some	Widely used for text, including spam filtering
Neural Network	Moderate	Medium to large	Lots	Popular for classification, compression, recognition, and forecasting