

Algorithm	Problem Type	Results interpretable by you?	Easy to explain algorithm to others?	Average predictive accuracy	Training speed	Prediction speed	Amount of parameter tuning needed (excluding feature selection)	Performs well with small number of observations?	Handles lots of irrelevant features well (separates signal from noise)?	Automatically learns feature interactions?	Gives calibrated probabilities of class membership?	Parametric?	Features might need scaling?	Algorithm
KNN	Either	Yes	Yes	Lower	Fast	Depends on n	Minimal	No	No	No	Yes	No	Yes	KNN
Linear regression	Regression	Yes	Yes	Lower	Fast	Fast	None (excluding regularization)	Yes	No	No	N/A	Yes	No (unless regularized)	Linear regression
Logistic regression	Classification	Somewhat	Somewhat	Lower	Fast	Fast	None (excluding regularization)	Yes	No	No	Yes	Yes	No (unless regularized)	Logistic regression
Naive Bayes	Classification	Somewhat	Somewhat	Lower	Fast (excluding feature extraction)	Fast	Some for feature extraction	Yes	Yes	No	No	Yes	No	Naive Bayes
Decision trees	Either	Somewhat	Somewhat	Lower	Fast	Fast	Some	No	No	Yes	Possibly	No	No	Decision trees
Random Forests	Either	A little	No	Higher	Slow	Moderate	Some	No	Yes (unless noise ratio is very high)	Yes	Possibly	No	No	Random Forests
AdaBoost	Either	A little	No	Higher	Slow	Fast	Some	No	Yes	Yes	Possibly	No	No	AdaBoost
Neural networks	Either	No	No	Higher	Slow	Fast	Lots	No	Yes	Yes	Possibly	No	Yes	Neural networks