

Maching learning algorithms cheatsheet

Algorithm	Problem Type	Interpretable results	Explainable algorithm	Predictive accuracy	Training speed	Prediction speed	Parameter tuning	Small observations performance	Separating signal from noise	Automatically learning feature interactions	Calibrated probabilities of class membership	Parametric	Features scaling
KNN	Either	Yes	Yes	Lower	Fast	Depends on K	Minimal	No	No	No	Yes	No	Yes
Linear regression	Regression	Yes	Yes	Lower	Fast	Fast	Minimal	Yes	No	No	N/A	Yes	Some
Logistic regression	Classification	Somewhat	Somewhat	Lower	Fast	Fast	Minimal	Yes	No	No	Yes	Yes	Some
Naive Bayes	Classification	Somewhat	Somewhat	Lower	Fast	Fast	Some	Yes	Yes	No	No	Yes	No
Decision trees	Either	Somewhat	Somewhat	Lower	Fast	Fast	Some	No	No	Yes	Possibly	No	No
Random Forests	Either	A little	No	Higher	Slow	Moderate	Some	No	Yes	Yes	Possibly	No	No
AdaBoost	Either	A little	No	Higher	Slow	Fast	Some	No	Yes	Yes	Possibly	No	No
Neural networks	Either	No	No	Higher	Slow	Fast	Lots	No	Yes	Yes	Possibly	No	Yes