

# How to select machine learning algorithms

What do you  
want to do  
with your  
data?

Algorithm Cheat Sheet

Additional  
requirements

Accuracy

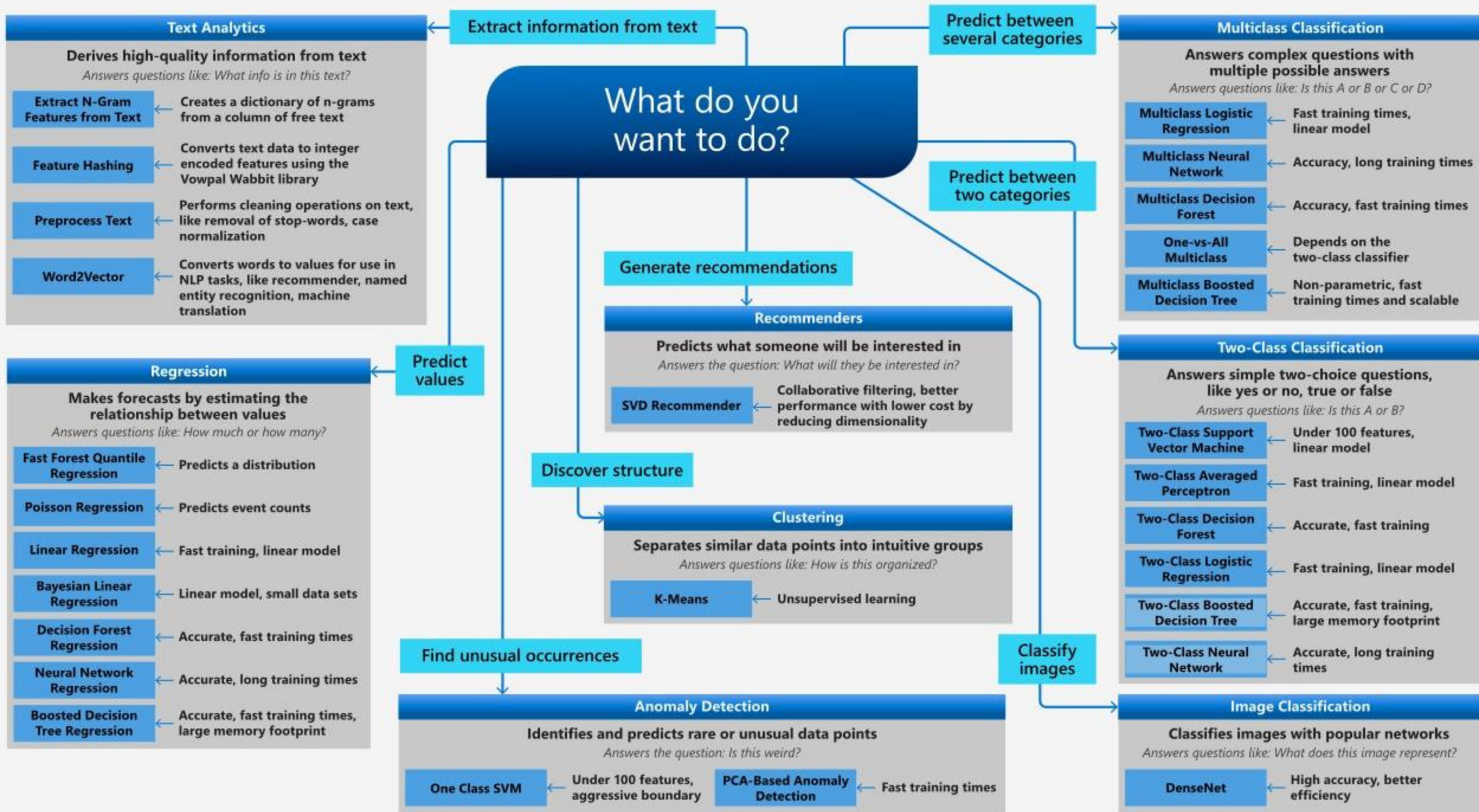
Training  
time

Linearity

Number of  
parameters

Number of  
features





Algorithm	Accuracy	Training time	Linearity	Parameters
LR	Good	Fast	Yes	<div><div></div></div> 4
Random Forest	Excellent	Moderate	No	<div><div></div></div> 5
Decision Tree	Excellent	Moderate	No	<div><div></div></div> 6
Neural Network	Good	Moderate	No	<div><div></div></div> 8
Support Vector Machine	Good	Fast	Yes	<div><div></div></div> 5
K Nearest Neighbours	Fair	Slow	No	<div><div></div></div> 2
Gaussian NB	Fair	Fast	Yes	<div><div></div></div> 2

Algorithm	General Use Case	Example
Logistic Regression	Classifying labeled data	Children are male/female
Decision Tree	Classifying points with a defined process	People hired from an interview
Neural Network	Unstructured learning on large-scale image or video datasets	Classifying image is of cat/dog
Support Vector Machine	Classification/regression with high-featured data	Classifying image, categorizing text
K Nearest Neighbours	Simple classification/regression tasks	Classifying types of flowers
Gaussian NB	Supervised text classification	Review is positive/negative