

Algorithm	Accuracy (correctly classified instances) (%)	Time to build model (s)	Readability
Naïve Bayes	92.9722	0.01	The Naïve Bayes classifier has a moderate level of readability, in that we are able to see the probabilities associated with the output classes, as well as the number of training instances in each class in the 'Classifier model (full training set)' section of the Weka output. However, while we are able to surmise the inner workings of the algorithm, in that it is evident how the algorithm classifies inputs, were we to receive a new input, we would not be able to classify the input without computing the probabilities, which is feasible as there are only 36 attributes to consider.
Multilayer Perceptron	93.4114	19.57	The Multilayer Perceptron is the most difficult classification algorithm to read. While we are able to see the weights between the nodes, the computation is far too complex to understand how the multilayer perceptron, or neural network, actually classifies the inputs, especially since we do not know the number of hidden layers, nor the number of neurons in each layer. Even a fully connected 'simple' multilayer perceptron with one hidden layer is a black box object, in that an output from an input cannot be understood, at least at the scale of 36 input attributes, of which many are multifaceted. As such, the multilayer perceptron is not a readable classification algorithm.
JRip	92.2401	0.13	
J48	91.5081	0.06	