

Weka Explorer

Preprocess

Classify

Cluster

Associate

Select attributes

Visualize

Classifier

Choose

SMO -C 1.0 -L 0.001 -P 1.0E-12 -N 0 -V -1 -W 1 -K "weka.classifiers.functions.supportVector.PolyKernel -E 1.0 -C 250007" -calibrator "weka.classifiers.functions.Logistic -R 1.0E-8 -M -1 -num-decimal-places 4"

Test options

Use training set

Supplied test set

Cross-validation

Folds

10

Percentage split

%

66

More options...

(Nom) class

Start

Stop

Result list (right-click for options)

09:52:02 - functions.SMO

Classifier output

=== Run information ===

Scheme: weka.classifiers.functions.SMO -C 1.0 -L 0.001 -P 1.0E-12 -N 0 -V -1 -W 1 -K "weka.classifiers.functions.supportVector.PolyKernel -E 1.0 -C 250007" -calibrator "weka.classifiers.functions.Logistic -R 1.0E-8 -M -1 -num-decimal-places 4"

Relation: iris

Instances: 150

Attributes: 5

sepalength

sepalwidth

petallength

petalwidth

class

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

SMO

Kernel used:

Linear Kernel:  $K(x,y) = \langle x,y \rangle$

Classifier for classes: Iris-setosa, Iris-versicolor

BinarySMO

Machine linear: showing attribute weights, not support vectors.

0.6829 \* (normalized) sepalength

+ -1.523 \* (normalized) sepalwidth

+ 2.2034 \* (normalized) petallength

+ 1.9272 \* (normalized) petalwidth

- 0.7091

Number of kernel evaluations: 352 (70.32% cached)

Classifier for classes: Iris-setosa, Iris-virginica

BinarySMO

Machine linear: showing attribute weights, not support vectors.

Status

OK

Log

x 0

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Choose SMO -C 1.0 -L 0.001 -P 1.0E-12 -N 0 -V -1 -W 1 -K "weka.classifiers.functions.supportVectorPolyKernel -E 1.0 -C 25000" -calibrator "weka.classifiers.functions.Logistic -R 1.0E-8 -M -1 -num-decimal-places 4"

Test options

☐ Use training set

☐ Supplied test set

☒ Cross-validation

☐ Percentage split

Folds 10

% 66

More options...

(Nom) class

Start

Stop

Result list (right-click for options)

09:52:02 - functions.SMO

Classifier output

Machine linear: showing attribute weights, not support vectors.

+ 0.5886 \* (normalized) sepalwidth

+ -0.5782 \* (normalized) sepalwidth

+ 1.6429 \* (normalized) petalwidth

+ 1.4777 \* (normalized) petalwidth

- 1.1668

Number of kernel evaluations: 284 (88.996% cached)

Classifier for classes: Iris-versicolor, Iris-virginica

BinarySMO

Machine linear: showing attribute weights, not support vectors.

+ 0.3176 \* (normalized) sepalwidth

+ -0.863 \* (normalized) sepalwidth

+ 2.0543 \* (normalized) petalwidth

+ 4.0815 \* (normalized) petalwidth

- 4.5924

Number of kernel evaluations: 453 (61.381% cached)

Time taken to build model: 0.13 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances14496%

Incorrectly Classified Instances84%

Kappa statistic0.94

Mean absolute error0.2311

Root mean squared error0.288

Relative absolute error52%

Root relative squared error61.101%

Total Number of Instances150

Status

OK

Log

x 0

Weka Explorer

PreprocessClassifyClusterAssociateSelect attributesVisualize

Classifier

ChooseSMO -C 1.0 -L 0.001 -P 1.0E-12 -N 0 -V -1 -W 1 -K "weka.classifiers.functions.supportVector.PolyKernel -E 1.0 -C 25000" -calibrator "weka.classifiers.functions.Logistic -R 1.0E-8 -M -1 -num-decimal-places 4"

Test options

Use training set

Supplied test set

Cross-validation

Percentage split

Set...

Folds10

%66

More options...

(Nom) class

Start

Stop

Result list (right-click for options)

09:52:02 - functions.SMO

Classifier output

0.3176 \* (normalized) sepal.length  
+ -0.663 \* (normalized) sepal.width  
+ 3.0543 \* (normalized) petal.length  
+ 4.0815 \* (normalized) petal.width  
- 4.5924  
  
Number of kernel evaluations: 453 (61.381% cached)  
  
Time taken to build model: 0.13 seconds  
  
=== Stratified cross-validation ===  
=== Summary ===  
  
Correctly Classified Instances14496%  
Incorrectly Classified Instances64%  
Kappa statistic0.94  
Mean absolute error0.2311  
Root mean squared error0.288  
Relative absolute error52%  
Root relative squared error61.101%  
Total Number of Instances150  
  
=== Detailed Accuracy By Class ===  
  
TP RateFP RatePrecisionRecallF-MeasureMCCROC AreaPRC AreaClass  
1.0000.0001.0001.0001.0001.0001.0001.000Iris-setosa  
0.9800.0500.9070.9600.9420.9130.9650.896Iris-versicolor  
0.9000.0100.9780.9000.9380.9100.9700.930Iris-virginica  
Weighted Avg.0.9600.0200.9620.9600.9600.9410.9780.942  
  
=== Confusion Matrix ===  
  
a b c <-- classified as  
50 0 0 | a = Iris-setosa  
0 49 1 | b = Iris-versicolor  
0 5 45 | c = Iris-virginica

Status

OK

Log

x0