

By Using Decision Tables(Use Training Data)

=== Run information ===

Scheme: weka.classifiers.rules.DecisionTable -X 1 -S "weka.attributeSelection.BestFirst -D 1 -N 5"

Relation: fa24-RCS-029

Instances: 8

Attributes: 4

Short Hair

Mustache

Beard

output

Test mode: evaluate on training data

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

Decision Table:

Number of training instances: 8

Number of Rules : 4

Non matches covered by Majority class.

Best first.

Start set: no attributes

Search direction: forward

Stale search after 5 node expansions

Total number of subsets evaluated: 7

Merit of best subset found: 87.5

Evaluation (for feature selection): CV (leave one out)

Feature set: 2,3,4

Time taken to build model: 0.01 seconds

=== Evaluation on training set ===

Time taken to test model on training data: 0 seconds

=== Summary ===

Correctly Classified Instances	7	87.5 %
--------------------------------	---	--------

Incorrectly Classified Instances	1	12.5 %
----------------------------------	---	--------

Kappa statistic	0.7143
-----------------	--------

Mean absolute error	0.3854
---------------------	--------

Root mean squared error	0.4156
-------------------------	--------

Relative absolute error	96.3542 %
-------------------------	-----------

Root relative squared error 95.3506 %

Total Number of Instances 8

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.833	0.000	1.000	0.833	0.909	0.745	0.917	0.958	-
	1.000	0.167	0.667	1.000	0.800	0.745	0.917	0.667	+
Weighted Avg.	0.875	0.042	0.917	0.875	0.882	0.745	0.917	0.885	

=== Confusion Matrix ===

a b <-- classified as

5 1 | a = -

0 2 | b = +

By Using Decision Tables(Use Percentage Split 66%)

=== Run information ===

Scheme: weka.classifiers.rules.DecisionTable -X 1 -S "weka.attributeSelection.BestFirst -D 1 -N 5"

Relation: fa24-RCS-029

Instances: 8

Attributes: 4

Short Hair

Mustache

Beard

output

Test mode: split 66.0% train, remainder test

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

Decision Table:

Number of training instances: 8

Number of Rules : 4

Non matches covered by Majority class.

Best first.

Start set: no attributes

Search direction: forward

Stale search after 5 node expansions

Total number of subsets evaluated: 7

Merit of best subset found: 87.5

Evaluation (for feature selection): CV (leave one out)

Feature set: 2,3,4

Time taken to build model: 0.01 seconds

=== Evaluation on test split ===

Time taken to test model on test split: 0 seconds

=== Summary ===

Correctly Classified Instances 2 66.6667 %

Incorrectly Classified Instances 1 33.3333 %

Kappa statistic 0

Mean absolute error 0.4722

Root mean squared error 0.5114

Relative absolute error 110.1852 %

Root relative squared error 119.3367 %

Total Number of Instances 3

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.667	?	1.000	0.667	0.800	?	?	1.000	-
	?	0.333	0.000	?	?	?	?	?	+
Weighted Avg.	0.667	?	1.000	0.667	0.800	?	?	1.000	

=== Confusion Matrix ===

a b <-- classified as

2 1 | a = -

0 0 | b = +

By using JRip(Use training set)

=== Run information ===

Scheme: weka.classifiers.rules.JRip -F 3 -N 2.0 -O 2 -S 1

Relation: fa24-RCS-029

Instances: 8

Attributes: 4

Short Hair

Mustache

Beard

output

Test mode: evaluate on training data

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

JRIP rules:

=====

=> output=- (8.0/2.0)

Number of Rules : 1

Time taken to build model: 0 seconds

=== Evaluation on training set ===

Time taken to test model on training data: 0 seconds

=== Summary ===

Correctly Classified Instances 6 75 %

Incorrectly Classified Instances 2 25 %

Kappa statistic 0

Mean absolute error 0.375

Root mean squared error 0.433

Relative absolute error 93.75 %

Root relative squared error 99.3399 %

Total Number of Instances 8

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	1.000	1.000	0.750	1.000	0.857	?	0.500	0.750	-
	0.000	0.000	?	0.000	?	?	0.500	0.250	+
Weighted Avg.	0.750	0.750	?	0.750	?	?	0.500	0.625	

=== Confusion Matrix ===

a b <-- classified as

6 0 | a = -

2 0 | b = +

By using OneR(By Using Train Data)

=== Run information ===

Scheme: weka.classifiers.rules.OneR -B 6

Relation: fa24-RCS-029

Instances: 8

Attributes: 4

Short Hair

Mustache

Beard

output

Test mode: evaluate on training data

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

Short Hair:

Yes -> -

No -> -

(6/8 instances correct)

Time taken to build model: 0 seconds

=== Evaluation on training set ===

Time taken to test model on training data: 0 seconds

=== Summary ===

Correctly Classified Instances 6 75 %

Incorrectly Classified Instances 2 25 %

Kappa statistic 0

Mean absolute error 0.25

Root mean squared error 0.5

Relative absolute error 62.5 %

Root relative squared error 114.7079 %

Total Number of Instances 8

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
--	---------	---------	-----------	--------	-----------	-----	----------	----------	-------

	1.000	1.000	0.750	1.000	0.857	?	0.500	0.750	-
--	-------	-------	-------	-------	-------	---	-------	-------	---

	0.000	0.000	?	0.000	?	?	0.500	0.250	+
--	-------	-------	---	-------	---	---	-------	-------	---

Weighted Avg. 0.750 0.750 ? 0.750 ? ? 0.500 0.625

=== Confusion Matrix ===

a b <-- classified as

6 0 | a = -

2 0 | b = +

By Using PART

=== Run information ===

Scheme: weka.classifiers.rules.PART -C 0.25 -M 2

Relation: fa24-RCS-029

Instances: 8

Attributes: 4

Short Hair

Mustache

Beard

output

Test mode: evaluate on training data

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

PART decision list

: - (8.0/2.0)

Number of Rules : 1

Time taken to build model: 0.01 seconds

=== Evaluation on training set ===

Time taken to test model on training data: 0 seconds

=== Summary ===

Correctly Classified Instances 6 75 %

Incorrectly Classified Instances 2 25 %

Kappa statistic 0

Mean absolute error 0.375

Root mean squared error 0.433

Relative absolute error 93.75 %

Root relative squared error 99.3399 %

Total Number of Instances 8

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	1.000	1.000	0.750	1.000	0.857	?	0.500	0.750	-
	0.000	0.000	?	0.000	?	?	0.500	0.250	+
Weighted Avg.	0.750	0.750	?	0.750	?	?	0.500	0.625	

=== Confusion Matrix ===

a b <-- classified as

6 0 | a = -

2 0 | b = +

By Using ZeroR

=== Run information ===

Scheme: weka.classifiers.rules.ZeroR

Relation: fa24-RCS-029

Instances: 8

Attributes: 4

Short Hair

Mustache

Beard

output

Test mode: evaluate on training data

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

ZeroR predicts class value: -

Time taken to build model: 0 seconds

=== Evaluation on training set ===

Time taken to test model on training data: 0 seconds

=== Summary ===

Correctly Classified Instances	6	75	%
--------------------------------	---	----	---

Incorrectly Classified Instances	2	25	%
----------------------------------	---	----	---

Kappa statistic	0
-----------------	---

Mean absolute error	0.4
---------------------	-----

Root mean squared error	0.4359
-------------------------	--------

Relative absolute error	100	%
-------------------------	-----	---

Root relative squared error	100	%
-----------------------------	-----	---

Total Number of Instances	8
---------------------------	---

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	1.000	1.000	0.750	1.000	0.857	?	0.500	0.750	-
	0.000	0.000	?	0.000	?	?	0.500	0.250	+
Weighted Avg.	0.750	0.750	?	0.750	?	?	0.500	0.625	

=== Confusion Matrix ===

a b <-- classified as

6 0 | a = -

2 0 | b = +