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Brownlee on August 3, 2016 in Weka Machine Learning

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Last Updated on December 10, 2020
Loving the Tutorials?

After you have found a way of performing a machine learning model and tuned it, you must finalize your model so that you can find the [Really Good stuff](#).

In this post >> SEE WHAT'S INSIDE finalize your machine learning model, save it to file and load it later in order to make predictions on new data.

After reading this post you will know:

- How to train a final version of your machine learning model in Weka.
- How to save your finalized model to file.
- How to load your finalized model later and use it to make predictions on new data.

Kick-start your project with my new book [Machine Learning Mastery With Weka](#), including step-by-step tutorials and clear screenshots for all examples.

Let's get started.

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How to Save Your Machine Learning Model and Make Predictions in Weka

Photo by Nick Kenrick, some rights reserved.

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Tutorial Overview Loving the tutorials?

This [Tutorial](#) is broken down into 4 parts. Part 1 is where you'll find the **Really Good** stuff.

1. **Finalize Model** where you will discover how to train a finalized version of your model.
2. **Save** >> SEE WHAT'S INSIDE cover how to save a model to file.
3. **Load Model** where you will discover how to load a model from file.
4. **Make Predictions** where you will discover how to make predictions for new data.

The tutorial provides a template that you can use to finalize your own machine learning algorithms on your data problems.

We are going to use the Pima Indians Onset of Diabetes dataset. Each instance represents medical details for one patient and the task is to predict whether the patient will have an onset of diabetes within the next five years. There are 8 numerical input variables and all have varying scales.

- [Dataset File](#).
- [Dataset Details](#).

Top results are in the order of 77% accuracy.

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We are going to finalize a logistic regression model on this dataset, both because it is a simple algorithm **Never miss a tutorial:** that is well understood and because it does very well on this problem.



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1. Finalize a Machine Learning Model



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Once you have gone through all of the effort to prepare your problem, you actually need to create the final model.

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Training a model involves training the model on the entire training dataset that you have available.

1. Open the Weka GUI Chooser.

2. Click the "Explorer" button to open the Weka Explorer interface.

The [Machine Learning with Weka](#) EBook is where you'll find the **Really Good** stuff.

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Weka Explorer

Preprocess Classify Cluster Associate Select attributes Visualize

Open... Open... Open DB... Generate... Undo Edit... Save...

Filter

Picked for you: Choose None Apply

relation How to Run Your First Classifier in Weka

Dataset: pima_diabetes Attributes: 9 Instances: 768 Sum of weights: 768

Attributes

How to Save Your Machine Learning Model and Make Predictions in Weka

None Invert Pattern

No.	Name
1	preg
2	plas
3	pres
4	skin
5	insu
6	mass
7	ped
8	age
9	class

Remove

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Selected attribute

Name: preg Type: Numeric
Missing: 0 (0%) Distinct: 17 Unique: 2 (0%)

Statistic	Value
Minimum	0
Maximum	17

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Log x 0

Weka Load Pima Indians Onset of Diabetes Dataset

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4. Click the “Classify” tab to open up the classifiers.
The [Machine Learning with Weka EBook](#) is where you'll find the [Really Good](#) stuff.
5. Click the “Choose” button and choose “Logistic” under the “functions” group.
6. Select >> SEE WHAT'S INSIDE >> [Test options](#).
7. Click the “Start” button.

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Weka Explorer

Preprocess Classify Cluster Associate Select attributes Visualize

in sifie Choose Logistic -R 1.0E-8 -M -1 -num-decimal-places 4

Picked for you:

Use training set How to Run Your First Classifier in Weka

Cross-validation Folds 10

Percentage split % 66

How to Save Your Machine Learning Model and Make Predictions in Weka

(Nom) class

How to Perform Feature Selection With Machine Learning Data in Weka

11:01:54 - functions.Logistic

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Classifier output

	Correctly Classified Instances	601	78.2552 %
Incorrectly Classified Instances	167	21.7448 %	
Kappa statistic	0.4966		
Mean absolute error	0.3063		
Root mean squared error	0.3908		
Relative absolute error	67.3928 %		
Root relative squared error	81.9907 %		
Total Number of Instances	768		

== Detailed Accuracy by class

	TP	FP	FN	TN	Weighted Avg.
a = test	0.8	0.5	0.5	0.7	0.7

== Confusion Matrix

	class	
445	b	a = test
112	55	b = test
156		

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Log x 0

Weka Train Logistic Regression Model

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This will train the chosen Logistic regression algorithm on the entire loaded dataset. It will also evaluate the model on the entire dataset, but we are not interested in this evaluation. The [Machine Learning with Weka EBook](#) is where you'll find the **Really Good** stuff.

It is assumed that you have already estimated the performance of the model on unseen data using cross validation as a part of selecting the algorithm you wish to finalize. It is this estimate you prepared previously that you can report when you need to inform others about the skill of your model.

Now that we have finalized the model, we need to save it to file.

2. Save Finalized Model To File

Continuing on from the previous section, we need to save the finalized model to a file on your disk.

This is so that we can load it up at a later time, or even on a different computer in the future and use it to make predictions. We won't need the training data in the future, just the model of that data.

You can easily save a trained model to file in the Weka Explorer interface.

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1. Right click on the result item for your model in the “Result list” on the “Classify” tab.
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2. Click “Save model” from the right click menu.



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[How to Save Your Machine Learning Model and Make Predictions in Weka](#)



[How to Perform Feature Selection With Machine Learning Data in Weka](#)



[How To Load CSV Machine Learning Data in Weka](#)

3. Select a location and enter a filename such as “logistic”



[Your model is now saved to the file “logistic.model”.](#)

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It is in a binary format (not text) that can be read again by the Weka platform. As such, it is a good idea to note down the version of Weka you used to create the model file, just in case you need the same version of Weka in the future to load the model and make predictions. Generally, this will not be a problem, but it is a good safety precaution.

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The [Machine Learning with Weka](#) EBook is
 You can close the Weka Explorer now. The next step is to discover how to load up the saved model.
 where you'll find the [Really Good](#) stuff.

3. Load Model

You can load saved Weka models from file.

The Weka Explorer interface makes this easy.

1. Open the Weka GUI Chooser.
2. Click the “Explorer” button to open the Weka Explorer interface.
3. Load any old dataset, it does not matter. We will not be using it, we just need to load a dataset to get access to the “Classify” tab. If you are unsure, load the *data/diabetes.arff* file again.
4. Click the “Classify” tab to open up the classifiers.

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5. Right click on the “Result list” and click “Load model”, select the model saved in the previous section “logistic.model”.



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[How to Perform Feature Selection With Machine Learning Data in Weka](#)

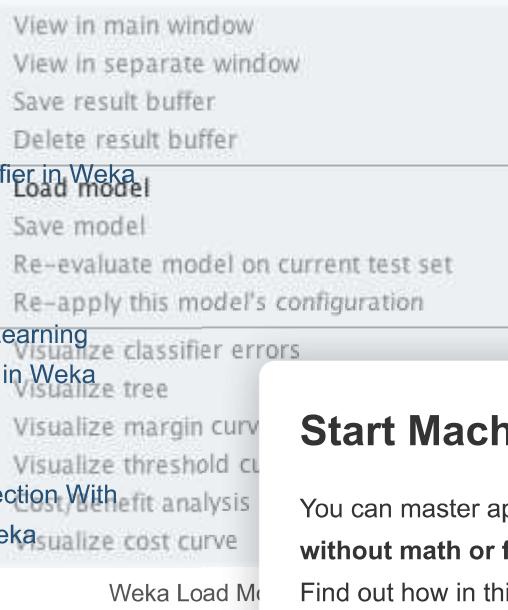


[How To Load CSV Machine Learning Data in Weka](#)
Model will now be loaded into the explorer.

We can now use the loaded model to make prediction



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The screenshot shows the Weka Explorer interface. In the center, there is a table titled "Classifier output" showing coefficients for a logistic regression model. The columns are "Variable" and "tested_". The rows include "preg", "ras", "pres", "skin", "insu", "mass", "pedi", and "age". To the right of the table is a modal window titled "Start Machine Learning" with the text: "You can master applied Machine Learning without math or fancy degrees. Find out how in this free and practical course." It has fields for "Email Address" and a "START MY EMAIL COURSE" button. The background sidebar lists several tutorials:

- Use training set
- How to Run Your First Classifier in Weka
- Applied test set
- Cross-validation Folds 10
- Percentage split % 66
- How to Save Your Machine Learning Model and Make Predictions in Weka
- More options...
- Model and Make Predictions in Weka
- (Nom) class
- How to Perform Feature Selection With Machine Learning Data in Weka
- Start Stop
- Test list (right-click for options)
- 11:14:41 - functions.Logistic from
- How To Load CSV Machine Learning Data in Weka
- Weka Machine Learning Mini-Course

Weka Model Loaded From File Ready For Use

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4. Make Predictions on New Data

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We can now make predictions on new data.

>> SEE WHAT'S INSIDE

First, let's create some pretend new data. Make a copy of the file "data/diabetes.arff" and save it as "data/diabetes-new-data.arff".

Open the file in a text editor.

Find the start of the actual data in the file with the @data on line 95.

We only want to keep 5 records. Move down 5 lines, then delete all the remaining lines of the file.

The class value (output variable) that we want to predict is on the end of each line. Delete each of the 5 output variables and replace them with question mark symbols (?).

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How to Save Your Machine Learning Model and Make Predictions in Weka



How to Perform Feature Selection With Output for Machine Learning Data in Weka

Continue on from the previous part of the tutorial where



How to Classify a New Machine Learning Test Set in Weka



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```

85 @relation pima_diabetes
86 @attribute 'preg' numeric
87 @attribute 'plas' numeric
88 @attribute 'pres' numeric
89 @attribute 'skin' numeric
90 @attribute 'insu' numeric
91 @attribute 'mass' numeric
92 @attribute 'pedi' numeric
93 @attribute 'age' numeric
94 @attribute 'class' { tested_negative, tested_positive}
95 @data
96 6,148,72,35,0,33.6,0.627,50,?
97 1,85,66,29,0,26.6,0.351,31,?
98 8,183,64,0,0,23.3,0.672,32,?
99 1,89,66,23,94,28.1,0.167,21,?

```

Weka Dataset For Ma

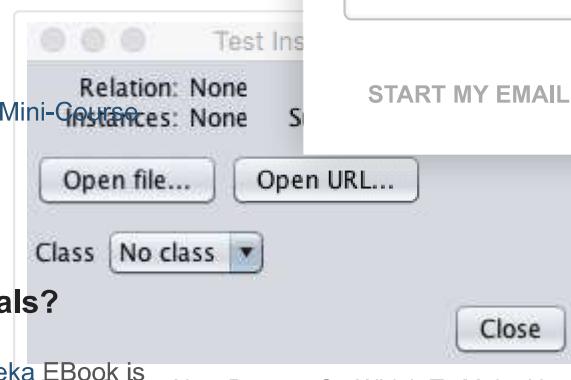
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Weka Select New Dataset On Which To Make New
where you'll find the **Really Good** stuff.
Predictions

2. Click the "Open file" button on the options window and select the mock new dataset we just created with the name "diabetes-new-data.arff". Click "Close" on the window.
3. Click the "More options..." button to bring up options for evaluating the classifier.
4. Uncheck the information we are not interested in, specifically:

- "Output model"
- "Output per-class stats"
- "Output confusion matrix"
- "Store predictions for visualization"

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[How to Perform Feature Selection With % Split Machine Learning Data in Weka](#)



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Classifier evaluation options

- Output model
- Output per-class stats
- Output entropy evaluation measures
- Output confusion matrix
- Store predictions for visualization
- Error plot point size proportional to margin

Output predictions PlainText

Cost-sensitive evaluation Set...

Random seed for Xval/ % Split

Preserve order for % Split

Output source code WekaClass

Evaluation

Weka Customized Test Opti

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5. For the “Output predictions” option click the “Choose” button and select “PlainText”.

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6. Click the “OK” button to confirm the Classifier evaluation options.

7. Right click on the list item for your loaded model in the “Results list” pane.

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8. Select “Re-evaluate model on current test set”.

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View in main window
View in separate window
Save result buffer
Delete result buffer
Load model
Save model
Re-evaluate model on current test set
Re-apply this model's configuration
Visualize classifier errors
Visualize tree
Visualize margin curve
Visualize threshold curve
Cost/Benefit analysis
Visualize cost curve

Weka Reevaluate Loaded Model On Test Data And Make Predictions

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The predictions for each test instance are then listed in the “Classifier Output” pane. Specifically the middle column of the results with predictions like “tested_positive” and “tested_negative”.

You could choose another output format for the predictions, such as CSV, that you could later load into a spreadsheet like Excel. For example, below is an example of the same predictions in CSV format.

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The screenshot shows the Weka Explorer interface. In the center, there is a window titled "Classifier output" displaying the following text:

```
== Re-evaluation on UserWithSupplied test set
Relation: pima_c
Instances: unknown
Attributes: 9

== Predictions on UserWithSupplied test set
inst#,actual,predict
1,1:?,2:tested_positive
2,1:?,1:tested_negative
3,1:?,2:tested_positive
4,1:?,1:tested_negative
5,2:tested_positive

== Summary ==
Total Number of Instances 0
Ignored Class Unknown Instances 5
```

At the bottom of the main window, there is a status message: "The Machine Learning with Weka EBook is where you'll find the **Really Good** stuff." Below this, there are buttons for "OK" and "Log".

A promotional overlay window titled "Start Machine Learning" is overlaid on the main window. It contains the following text:

You can master applied Machine Learning **without math or fancy degrees**. Find out how in this *free* and *practical* course.

There is a text input field labeled "Email Address" and a button labeled "START MY EMAIL COURSE".

More Information

The Weka Wiki has some more information about saving and loading models as well as making predictions that you may find useful:

- Saving and loading models
- Making predictions

Summary

In this post you discovered how to finalize your model and make predictions for new unseen data. You can see how you can use this process to make predictions [Start Machine Learning](#)

Specifically, you learned:
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How to train a final instance of your machine learning model.

How to save a finalized model to file for later use.

- How to load a model from file and use it to make predictions on new data.

Picked for you:

Do you have any questions about how to finalize your model in Weka or about this post? Ask your

[Question Here](#) and I will do my best to answer them.



How to Save Your Machine Learning Model and Make Predictions in Weka

Discover Machine Learning Without The Code!



How to Perform Feature Selection With Machine Learning Data in Weka
Analyze Data, Develop Models and Work Through Projects

How To Load CSV Machine Learning Data in Weka

Covers selecting
Loading data,

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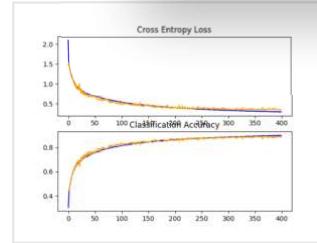
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More On This Topic

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How to Save Your Machine Learning Model and Make Predictions in Weka



How to Work Through a Real Machine Learning Project in Weka



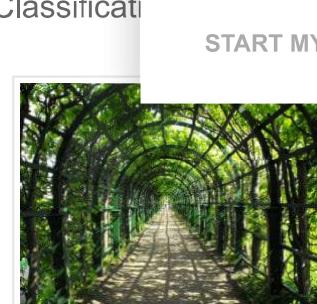
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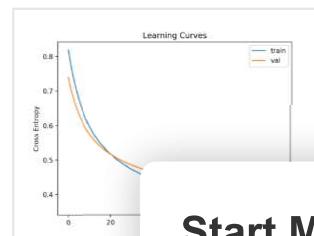
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[TensorFlow 2 Tutorial: Get Started With Machine Learning Data in Weka](#)

**About Jason Brownlee**

[How To Load CSV Machine Learning Data](#)

Jason Brownlee, PhD is a machine learning researcher and author who teaches modern machine learning methods via hands-on projects.

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187 Responses to **How to Save Your Machine Learning Model and Make Predictions in Weka**
Predict'

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Kanan October 26, 2016 at 2:34 am #

REPLY ↗

Hi

Can I open the saved model by any other program?

I want to use the saved model as a web service, but not using weka for predication.

Is there any way

Thanks



Jason Brownlee October 26, 2016 at 8:30 am #

REPLY ↗

I have not done this myself Kanan.

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You may be able to use the PMML format:

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<http://wiki.pentaho.com/display/DATAMINING/PMML+Support+in+Weka>



Picked for you: **Ralph** November 16, 2016 at 7:38 am #

REPLY ↩



Unfortunately the link says "There is no support for exporting PMML models from Weka yet."



[How to Save Your Machine Learning Model and Make Predictions in Weka](#)

Thankssssss.....



[How to Perform Feature Selection With Machine Learning Data in Weka](#)



C October 28, 2016 at 8:49 am #



[How To Load CSV Machine Learning Data in Weka](#)
How do I predict continuous output in Weka?
negative (not set)!" error when I try to run model on tes



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Jason Brownlee October 28, 2016 at 9:20 am #

REPLY ↩

Great question.

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Use a regression algorithm to predict a continuous value.

The [Machine Learning with Weka EBook](#) is
Here is a tutorial to get you started:
where you'll find the **Really Good** stuff.
<http://machinelearningmastery.com/use-regression-machine-learning-algorithms-weka/>

>> SEE WHAT'S INSIDE



C October 28, 2016 at 10:10 am #

REPLY ↩

Is the M5P not capable of regression prediction with categorical and continuous variables? I thought regression trees could do that?



Kayode November 10, 2016 at 2:04 pm #

REPLY ↩

Thank you so much for this tutorial. It is really straightforward. Really enjoy it. Thanks.

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Never miss a tutorial:**Jason Brownlee** November 11, 2016 at 10:00 am #[REPLY ↗](#)**Picked for you:****Ametun** December 9, 2016 at 1:57 pm #

How to Run Your First Classifier in Weka

[REPLY ↗](#)

Thank you so much for this tutorial. It is very useful for me.Thanks.



How to Save Your Machine Learning

Model and Make Predictions in Weka

Jason Brownlee December 10, 2016 at 8:03 am #I'm glad to hear that Ametun,
How to Perform Feature Selection With
Machine Learning Data in Weka**Diane** December 21, 2016 at 2:51 am #
How To Load CSV Machine Learning Data

in Weka

Hey, thank you very much for your help!

Just a sidenote for those who have problems with doing
output files. The above description is perfect for .arff but
[Weka Machine Learning Mini-Course](#)
lines only and stopped for no reason. Transforming
problem.

I am looking forward to more tutorials from you 😊

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Jason Brownlee December 21, 2016 at 8:42 am #
where you'll find the **Really Good** stuff.[REPLY ↗](#)

THANKS FOR YOUR TUTORIALS.

[>> SEE WHAT'S INSIDE](#)[REPLY ↗](#)**bayo** January 3, 2017 at 10:12 pm #[REPLY ↗](#)

Good day,

Thanks for your good work. Please I need your assistance, i am working on crime and i am new in using weka.I have used weka to divide my data set into both test and training data set both in CSV format. but the system is complaining whenever I put classifier (such as Bayes, KNN) and i loaded the tested data set on it.

Please help me on this

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Never miss a tutorial:**Jason Brownlee** January 4, 2017 at 8:52 am #

REPLY ↗



What is the error exactly? What is the complaint that Weka is making?

Picked for you:**Esan** January 3, 2017 at 10:54 pm #

REPLY ↗

Hello,

Please should train dataset and test dataset be of the same format. If yes why then is my weka complain of incompatible test data set. Also is it the test data that we are converting back to plain test?

**How to Save Your Machine Learning Model and Make Predictions in Weka****Jason Brownlee** January 4, 2017 at 8:54 am #

Machine Learning Data in Weka

Yes, the train and test must be the same!



You may not know the predicted outcome, in which
How To Load CSV Machine Learning Data
in Weka

**bayo** January 7, 2017 at 5:36 pm #
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Thanks. I really appreciate your efforts, your teaching was superb

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Jason Brownlee January 8, 2017 at 5:20 am #

REPLY ↗

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Thanks! where you'll find the *Really Good* stuff.

>> SEE WHAT'S INSIDE

**Lujain** January 7, 2017 at 7:26 pm #

REPLY ↗

Thanks for the tutorial. I have a question, why the number of instances is unknown? and how can I evaluate the accuracy of the prediction? I mean I need to see the number of correctly classified instances and so on...

Jason Brownlee January 8, 2017 at 5:21 am #

REPLY ↗

This tutorial was about making prediction in new data.

If you have data for which you already know the expected output. you can make predictions on it by selecting it as an external test dataset in Weka.

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Never miss a tutorial:

REPLY ↗

Hi,

Picked for you:

I need to train model on separate genre(blogs data) and test on another genre(hotel reviews). I trained a model by 1. applying StringToWordVector filter(change some settings of filter) 2. attribute selection 3. applied [sift blog to Run Your First Classification With Weka](#) 4. saved the model. Now I am confused about testing file, should I need to apply all these steps till 3 on test file also? by doing this my train and test file attributes are different but the same format.

Should my training file attribute and test file attribute exactly the same(same to same)? If yes then can I copy the attributes from training file(`top4 @data`) and paste in my test file, is it correct?

train and test file attributes can be different then they are not compatible. Would you like to automatically wrap them?

mean? if choose Yes what will it do.
[How to Perform Feature Selection With Weka](#)

sir, I have many questions. I explored a lot still confused. Thank you



[How To Load CSV Machine Learning Data in Weka](#)

in Weka
Mike March 4, 2017 at 4:15 am #



Hi,
[Weka Machine Learning Mini-Course](#)

We built a logistic regression model in Weka and want to be able to identify what the predictions were for each specific data point. The output I currently have does not allow me to match the predictions to the individual instances.

Thanks, **Loving the Tutorials?**

Mike

The [Machine Learning with Weka](#) EBook is where you'll find the **Really Good** stuff.



>> SEE WHAT'S INSIDE

March 6, 2017 at 10:52 am #

REPLY ↗

Hi Mike,

The order of the predictions should match the order of the data in your input file used to make predictions.



Bellz May 2, 2017 at 2:03 am #

REPLY ↗

Awesome article! Very simple and right to the point!

Jason Brownlee May 2, 2017 at 6:02 am #

Start Machine Learning



Thanks Bellz.



Kanika Sood May 11, 2017 at 5:47 pm #

REPLY ↗

Picked for you:

Hi Jason

[How to Run Your First Classifier in Weka](#)

Great article. I followed the steps you suggested and I am applying Random Forest classifier. I have the same set of attributes for the training and test set. However in the stage where I predict for unknown data, it ignores all the instances. Below is the message I get in the classifier output:

==== Summary ===



[How to Save Your Machine Learning Model and Make Predictions in Weka](#)
Number of Instances 0
Preferred Class Unknown Instances 72

==== Confusion Matrix ===



[How to Perform Feature Selection With Machine Learning Data in Weka](#)
classified as
a = good
0 0 | b = bad



[How To Load CSV Machine Learning Data in Weka](#)
you please suggest what am I doing wrong?

Weka Machine Learning Mini-Course
Jason Brownlee May 12, 2017 at 7:36 am #

Perhaps the test set data is corrupt or not loading correctly?

Loving the Tutorials?

The Machine Learning With Weka EBook is May 25, 2018 at 3:48 pm #

REPLY ↗

where you'll find the **Really Good** stuff.

kanika sood ...can you help me ...i m stuck with the same error ???

>> SEE WHAT'S INSIDE



Kanika Sood May 11, 2017 at 6:54 pm #

REPLY ↗

I got the answer to my earlier question. Here is the questions I have now: Random Forest, BayesNet always predicts only one class for all instances.



Jason Brownlee May 12, 2017 at 7:38 am #

REPLY ↗

Perhaps you need to reframe your problem or collect more data.

If you have all instances of one class, you may need to collect examples of the other class.

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This process will help you work through your problem:
Never miss a tutorial: <http://machinelearningmastery.com/start-here/#process>



Picked for you: **Billy Rogers** May 20, 2017 at 12:38 am #

Elegant, simple exercise.
[How to Run Your First Classifier in Weka](#)

REPLY ↗

Jason Brownlee Learning May 20, 2017 at 5:38 am #

Model and Make Predictions in Weka

Thanks, I'm glad it helped Billy!

REPLY ↗

How to Perform Feature Selection With Machine Learning Data in Weka

Kittikorn June 27, 2017 at 1:33 am #

My apology if there was someone asked this question before me.
[How To Load CSV Machine Learning Data](#)
 In Weka
 When I used my model to predict new data, the result is only one record. I would like to ask how to make the model to predict all records (about 1000 records).

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REPLY ↗

Jason Brownlee June 27, 2017 at 8:32 am #

There is no limit, pass all inputs to `model.predict(X)` to get predictions.
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REPLY ↗

Angel Gallardo August 2, 2017 at 2:03 am #

>> SEE WHAT'S INSIDE

Hi Jason thanks for the post! Is there a way to get the top 3 predictions?



Jason Brownlee August 2, 2017 at 7:55 am #

REPLY ↗

What do you mean exactly "top 3 predictions"?



Denis August 22, 2017 at 2:32 am #

REPLY ↗

First of all, thank you for making me discovering this Weka. I am one of the many that after a tutorial, after a confusion matrix, I was saying "great!, now what?"

[Start Machine Learning](#)

I just ended a very long course on Data Science and Python on Udemy... is it too daring from me thinking
Never miss a tutorial!
 that Weka can substitute python? (at least for simple tasks?)



 **Jason Brownlee** August 22, 2017 at 6:47 am #

REPLY ↗

 It can and should for many beginners working on small one-off projects.
[How to Run Your First Classifier in Weka](#)

Get started with Weka here:

<https://machinelearningmastery.com/start-here/#weka>

 How to Save Your Machine Learning
Model and Make Predictions in Weka

 **Denis** August 24, 2017 at 8:09 pm #

 How to Perform Feature Selection With
Machine Learning Data in Weka
Thank you!!

 How To Load CSV Machine Learning Data
sam August 22, 2017 at 9:07 pm #
in Weka

this blog is really helpful, can you please suggest
the model using Python where users can put the data in
[Weka Machine Learning Mini-Course](#)
native

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 **Jason Brownlee** August 23, 2017 at 6:49 am #

REPLY ↗

The [Machine Learning with Weka](#) book has applications in Python. Perhaps a web interface?
 where you'll find the **Really Good** stuff.

>> SEE WHAT'S INSIDE



Ilan August 26, 2017 at 5:46 am #

REPLY ↗

Thanks Jason, this is super helpful. Do you know if there is a way to save particular multilayer perceptron configurations? I'm running the perceptron classifier and set GUI to true in order to tinker with it, but I can't for the life of me figure out how to save the tinkered configuration so that I can reuse it. I've looked everywhere.

 **Jason Brownlee** August 26, 2017 at 6:49 am #

REPLY ↗

After you fit the model you can save it.

When you run the model, the Explorer window should give you the command line parameters needed to re-create the model configuration at the top.

[Start Machine Learning](#)

Never miss a tutorial:

REPLY ↗

Hmm, that correctly saved the usual parameters like Num Epochs, Learning Rate, etc., but it didn't save the particular perceptron GUI tweaks — say, ones where I connect and disconnect certain nodes to other certain nodes by hand using the perceptron GUI.

[How to Run Your First Classifier in Weka](#)

miss a step, or is there something else I'm supposed to do that's unique to allowing it to save changes made in the GUI?

Thank you!



[How to Save Your Machine Learning Model and Make Predictions in Weka](#)

Zoya September 25, 2017 at 8:25 pm #

[How to Perform Feature Selection With](#)

[Machine Learning Data in Weka](#)

Thanks for the tutorial. I am new to Weka and wanted to know how to judge the predicted value for a



[Predictions and CSV Method in Learning Data](#)

in Weka
actual predicted error prediction

1 1:? 2:tested_positive 0.722

2 1:? 1:tested_negative 0.951
[Weka Machine Learning Mini-Course](#)

2:tested_positive 0.797

? 1:tested_negative 0.958

5 1:? 2:tested_positive 0.902

Also, what does 2 in 2:tested_positive mean?

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Jason Brownlee September 26, 2017 at 5:36 am #

REPLY ↗

>> SEE WHAT'S INSIDE

Great question! Yes, the order of the predictions will match the order of the observations in the input file.

The prediction is probably a class number (1 or 2) and the associated label in the problem (positive or negative).



Zoya September 26, 2017 at 2:28 pm #

REPLY ↗

Thank you

Jason Brownlee September 26, 2017 at 3:01

[Start Machine Learning](#)



You're welcome.

Never miss a tutorial:



Dharani Nimmagadda October 23, 2019 at 1:00 am #

REPLY ↗

Picked for you:

Hai.

I ran weka in my Linux os and I got confusion matrix output. Now I would like to use these values in a graph how can I access this values. What code do I use.



How to Save Your Machine Learning

Model and Mason Browne

Weka October 23, 2019 at 6:55 am #

REPLY ↗

Sorry, I don't follow, what do you mean?

How to Perform Feature Selection With
Machine Learning Data in Weka

Yaw Antwi-Adjei October 29, 2017 at 12:35 am #

How To Load CSV Machine Learning Data
in Weka. Thank you for the good tutorial. Is there
any way to load dataset from URL?

- Choose the appropriate Model (i.e Classifier)
- Run the Supplied Test Set
- Save the Model
- Load and dataset in WEKA Explorer just to have access to the Classifier tab
- Load your Model
- Open the new file, and finally
- Re-evaluate the model on the new file for your predictions.

The [Machine Learning with Weka](#) EBook is
where you'll find the **Really Good** stuff.



>> SEE WHAT'S INSIDE October 29, 2017 at 5:54 am #

REPLY ↗

Yes! It is perfect for beginners.

You can go deeper on various aspects and I recommend using the Experiment for being systematic in your exploration.



Rubel November 2, 2017 at 3:41 am #

REPLY ↗

how can I calculate each predictor odd ratio, 95% CI, and P-value.

Rubel November 2, 2017 at 3:42 am #

Start Machine Learning

Never miss a tutorial:
When I am going to installed new packages, it is showing an error message. How can I solve this problem



Picked for you: Haya November 8, 2017 at 10:16 pm #

REPLY ↗

 Hello Jason,
[How to Run Your First Classifier in Weka](#)

can I make predictions and produce Actual value by using R program ?

 How to Save Your Machine Learning Model and Make Predictions in Weka
Jason Brownlee November 9, 2017 at 9:59 am

See this post:
[How to Perform Feature Selection With Machine Learning Data in Weka](https://machinelearningmastery.com/perform-feature-selection-ml-data-weka/)

 How To Load CSV Machine Learning Data in Weka
Pedro November 18, 2017 at 9:40 am #

Hello Jason,

 I am trying to further tune and test the algorithms, obtain different distribution of the instances so that I can choose to mimic your world distribution or keep it 50/50 and see which option gives me better accuracy with the test set (that will have real-world-like distribution). I would not like to save many models, naturally. Could I then re-evaluate without saving it, skipping to step four as soon as I finish cross-validation with the training set?

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Jason Brownlee November 18, 2017 at 10:29 am #

REPLY ↗

>> SEE WHAT'S INSIDE

configuration, discard all CV models and train a final model.

See this post on the topic:

<https://machinelearningmastery.com/train-final-machine-learning-model/>

REPLY ↗



oksana December 3, 2017 at 1:21 am #

thank you very much for great tutorials, Dr. Brownlee. They help me a lot in my final project at school.

I would like to perform this kind of predictive modeling techniques at work, but we work with very large data sets (millions of tuples) so my question is – would Weka be able to handle very large data sets? Weka seems very easy and user friendly tool.

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Never miss a tutorial:**Jason Brownlee** December 3, 2017 at 5:25 am #

REPLY ↗

I would recommend taking a sample of your data to model, small enough to fit into memory with

Weka.

Picked for you:**How to Run Your First Classifier in Weka**

REPLY ↗

kanishka January 9, 2018 at 2:40 pm #

how to carry out weka result to android phone

How to Save Your Machine Learning**Model and Make Predictions in Weka****Jason Brownlee** January 9, 2018 at 3:20 pm #

How to Perform Feature Selection With

Machine Learning Data in Weka

I don't know, sorry.

**How To Load CSV Machine Learning Data**in **Weka****Lina** February 15, 2018 at 5:24 am #Hi jason,
Weka Machine Learning Mini-Course

Iha and i read each tutorial step on top But still

properly? Example on top show you use 5 same data to predict the class....

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without math or fancy degrees.Find out how in this *free* and *practical* course. Email Address**START MY EMAIL COURSE****Loving the Tutorials?****Jason Brownlee** February 15, 2018 at 8:51 am #

REPLY ↗

The **Machine Learning with Weka** EBook iswhere you ~~Sure, the~~ ~~Really Good~~ ~~Helps~~ you could restate your question or give more context?

>> SEE WHAT'S INSIDE

**Jac** May 18, 2018 at 11:30 pm #

REPLY ↗

Hello,

How can I make website with PMML model implemented to be available for a public use?

For example user input 10 parametrs and receive a result calculated by PMML?

**Jason Brownlee** May 19, 2018 at 7:40 am #

REPLY ↗

Sorry, I don't have an example of creating a website from a model.

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June 17, 2018 at 3:23 pm #

REPLY ↗

 Hi John, many thanks for this great work you are involved in. Please, is there any provision for deploying Ripple Down Rule (Ridor) Learner in WEKA? If it is possible, how can I go about it?

Picked for you:**How to Run Your First Classifier in Weka** June 17, 2018 at 5:38 am #

REPLY ↗

There may be Ben, but I am not across it sorry.

**How to Save Your Machine Learning Model and Make Predictions in Weka****Guylaine Bourque** July 10, 2018 at 10:52 am #

How to Perform Feature Selection With Machine Learning in Weka
Does not save the results csv file ?

**How To Load CSV Machine Learning Data in Weka****Jason Brownlee** July 10, 2018 at 2:26 pm #

Weka Machine Learning Mini-Course
Yes! You will have to save it manually. Weka models.

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START MY EMAIL COURSE**Loving the Tutorials?****Rodrigo Nava** September 18, 2018 at 8:20 am #

REPLY ↗

The [Machine Learning with Weka](#) EBook is
Hello, Thanks for the tutorial.
where you'll find the **Really Good** Stuff.

My question is:

Is it possible to see what's inside a model or Split-percentage in data loaded from a model?

Or if I want to perform any of those two, I have necessarily to load the corresponding training dataset and build a new model for them?

**Jason Brownlee** September 18, 2018 at 2:18 pm #

REPLY ↗

What do you mean exactly?

CV and split are methods for using a training data to evaluate a model. How could it "come" from the model?

Rodrigo Nava September 18, 2018 at 4:00 pm #**Start Machine Learning**

Never miss a tutorial:

Thanks for the answer.

I have the following situation:



I use “data.arff” “training.arff” and a classifier, say RandomForest, to generate a model “model1.model”, then I save it.

If I want to evaluate a testing set with it, I load “model1.model” and use the option “reevaluate model

Picked for you:



But if I want to validate my model, I find that there’s no direct way to use CV or split directly over the data used from model1.model. I have necessarily to reload “training.arff”, use CV, and see how it says “building model for training data”, meaning that it is generating another model.



I was wondering if it was possible to validate generated models.

[How to Save Your Machine Learning Model and Make Predictions in Weka](#)



[How to Perform Feature Selection With Machine Learning Data in Weka](#) September 19, 2018

I recommend validating the mode



[How To Load CSV Machine Learning Data in Weka](#)

Shabbar Imran October 11, 2018 at 6:03 pm #



[Weka Machine Learning Mini-Course](#)

How can I predict between two different dat



Jason Brownlee October 12, 2018 at 6:36 am #

REPLY ↗

What do you mean exactly?

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REPLY ↗



>> SEE WHAT'S INSIDE

Las msu October 28, 2018 at 6:23 pm #

REPLY ↗

Hi thanks for the hard work, it really helped me a lot.

Here's my question

==== Predictions on user test set ===

inst# actual predicted error prediction

1 1:? 2:tested_positive 0.722

2 1:? 1:tested_negative 0.951

3 1:? 2:tested_positive 0.797

4 1:? 1:tested_negative 0.958

5 1:? 2:tested_positive 0.902

what does the number below prediction means?

the 0.722 ,0.951,0.797

does it mean the probability of the prediction being cor

[Start Machine Learning](#)

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October 29, 2018 at 5:55 am #

REPLY ↗

Yes, the probability of the prediction for the class.

Picked for you:[How to Run Your First Classifier in Weka](#)

Saubhik Paladhi November 9, 2018 at 6:24 pm #

REPLY ↗

Hi, thanks for your informative article.

[How to Save Your Machine Learning Model and Make Predictions in Weka](#)

to get the index of the test data that is being teste

=====

[How to Perform Feature Selection With Machine Learning Data in Weka](#)

Dataset : Iris.arff

Total instances : 150

[How To Load CSV Machine Learning Data in Weka](#)

validation: 10 fold

in Weka

I have also made output prediction as "PlainText"

[Weka Machine Learning Mini-Course](#)

the output window I can see like this :-

inst# actual predicted error prediction

1 3:Iris-virginica 3:Iris-virginica 0.976

2 3:Iris-virginica 3:Iris-virginica 0.976

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3 3:Iris-virginica 3:Iris-virginica 0.976

4 3:Iris-virginica 3:Iris-virginica 0.976

5 3:Iris-virginica 3:Iris-virginica 0.976

6 1:Iris-setosa 1:Iris-setosa 1

7 1:Iris. >> SEE WHAT'S INSIDE

....

....

....

Total 10 test data set .(15 instances in each).

=====

As WEKA uses stratified cross validation, instances in the test data sets are randomly chosen.

So, How to know the index of the test data instance whose prediction evaluation is being shown in above lines?

i.e

inst# actual predicted error prediction

1 3:Iris-virginica 3:Iris-virginica 0.976

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This result is for which instance (among total 50 Iris-virginica) ?
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=====



In the main data file, few instances are :

5.1,3.5,1.4,0.2,Iris-setosa

4.9,3.0,1.4,0.2,Iris-setosa

4.7,3.2,1.3,0.2,Iris-setosa

3.1,1.6,5.0,1.6,Iris-setosa

5.0,3.3,1.3,0.2,Iris-setosa

5.4,3.9,1.7,0.4,Iris-setosa

So the main data file starts with Iris-setosa.

[How to Save Your Machine Learning Model and Make Predictions in Weka](#)



Jason Brownlee November 10, 2018 at 6:00 am #

Machine Learning Data in Weka

The index should be the row number in the



[How To Load CSV Machine Learning Data in Weka](#)

Otaku san November 27, 2018 at 8:31 am #



Hi, thank you for the wonderful tutorial.
[Weka Machine Learning Mini-Course](#)

using csv instead of arff.

When I supply test set with 145 true and 70 false instances (in that order), the result is shown only for 145 instances. It doesn't calculate the result for the 70 instances.

If the set is randomly ordered, the result is shown only for the first few instances with same true/false value.

For e.g., if 1st instance is false, and 11th is true, the result (and confusion matrix) is only calculated for the first ten instances.

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 Please help,
 where you'll find the **Really Good** stuff.

————— >> SEE WHAT'S INSIDE —————



Jason Brownlee November 27, 2018 at 2:09 pm #

REPLY ↗

Perhaps the data was not loaded correctly?



Nikhil December 5, 2018 at 1:09 am #

REPLY ↗

How do we get the output prediction in the original form?



Jason Brownlee December 5, 2018 at 6:18 am #

REPLY ↗

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What do you mean exactly?
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Laurence Foz December 16, 2018 at 10:58 pm #

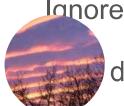
REPLY ↗

Picked for you:

Hello there Jason. Have been following some of your tutorials on here for some time. Glad to see still answer questions. Mine is regarding the test set. I made all the instances of class in the @data [How to Run Your First Classifier in Weka](#) as "?" like in the example but why is the result of my model's classification like this?



"Total Number of Instances: 0



Ignored Class Unknown Instances: 7401"

[How to Save Your Machine Learning](#)



~~discussing how to make predictions with the model I used was~~



[How to Perform Feature Selection With](#)



[Machine Learning in Python with Weka](#)



December 17, 2018 at 6:21 am #



No, you can ignore that note. We are forc



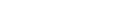
[Make Predictions With Exploring Data](#)



in Weka



[Weka Machine Learning Mini Course](#)



January 3, 2019 at 2:17:48 am #

If I have a model build with J48. and StringToWordVector

How do I feed in the data for the model classifier to classify in java ?

```
Classifier cls = (Classifier) weka.core.SerializationHelper.read("c:\identify.model");
```

```
ArrayList classes = new ArrayList(3);
```

```
classes.add("type1");
```

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```
classes.add("type2");
```

```
classes.add("type3");
```

>> SEE WHAT'S INSIDE

```
//Class attribute
```

```
Attribute classAttribute = new Attribute("class", classes);
```

```
ArrayList attributes = new ArrayList(2);
```

```
Attribute text=new Attribute("text", true);
```

```
attributes.add(text);
```

```
attributes.add(classAttribute);
```

```
// Create the empty dataset "sample" with above attributes
```

```
Instances sample = new Instances("sample", attributes, 0);
```

```
// Make position the class attribute
```

```
sample.setClassIndex(classAttribute.index());
```

```
// Create empty instance with five attribute values
```

```
Instance inst = new DenseInstance(2);
```

```
// Set instance values
```

```
inst.setValue(text, "What is this are you kidding me 1 2
```

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// Set instance's dataset to be the dataset "race"
Never miss a tutorial:
inst.setDataset(sample);
// Set class as missing so we can predict
inst.setClassValue(0); When set class as missing, the filter not working at all.
sample.add(inst);

Picked for you:
System.out.println(sample.toString());

 [Using TensorFlow to Filter First Classifiers in Weka](#)
inst=filter.useFilter(sample, filter);
System.out.println(sample);

 [How to Save Your Machine Learning Model and Make Predictions in Weka](#)

 **Jason Brownlee** January 12, 2019 at 5:44 am #

 [How to Perform Feature Selection With Weka Machine Learning Data in Weka](#)

 [How To Load CSV Machine Learning Data in Weka](#)
 **Alex** January 12, 2019 at 4:46 pm #

I want to add one more column to the .arff file
 I want to be present on the prediction output, it is just kind of output – how would I go about it in Explorer?
Thanks a lot.

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 **Jason Brownlee** January 12, 2019 at 5:40 am #
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[REPLY ↗](#)

I'm not sure off hand, sorry. Perhaps try posting to the weka users group.

[">>> SEE WHAT'S INSIDE](#)

[REPLY ↗](#)

 **Vassilis** January 18, 2019 at 12:01 am #

Hello Jason! Thank you for your helpful tutorials!

I used MPRegressor and got the following model:

MPRegressor with ridge value 0.01 and 2 hidden units (useCGD=true)

Output unit 0 weight for hidden unit 0: 2.9058790401172043

Hidden unit 0 weights:

-0.2878670472862872 A
0.4012790926803488 B
0.6114550533482614 C

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0.09745324473246314 D
Never miss a tutorial:
 -0.26600053341756486 E



Output unit 0 weight for hidden unit 1: -0.239991138003868

Picked for you:

Hidden unit 1 weights:

1472828043452175 First Classifier in Weka

0061719076585 B

-4.318804805199649 C

-2.077452814137676 D

359 How to Save Your Machine Learning Model and Make Predictions in Weka
 Hidden unit 1 bias: 0.21400772835364332

Output unit 0 bias: -1.2579970537867124

How to Perform Feature Selection With Machine Learning Data in Weka?

How To Load CSV Machine Learning Data

Wek Jason Brownlee

January 18, 2019 at 5:41 am

Well done!

Weka Machine Learning Mini-Course
 I don't know about using Weka models in excel, so

Harry January 31, 2019 at 11:11 am #

REPLY ↗

Hello sir good day!

The [Machine Learning with Weka](#) Ebook is where you'll find the **Really Good** stuff. can you help me how to setup logistic regression model so that its prediction is more than 1 or 2.

==== Pr >> SEE WHAT'S INSIDE ==

inst# actual predicted error prediction predicted error prediction
 1 1:? 4:BSBA 0.328 6:BEED 0.618

is this possible?



Jason Brownlee January 31, 2019 at 2:24 pm #

REPLY ↗

Generally, logistic regression is for binary classification problems.



Harry January 31, 2019 at 2:49 pm #

[Start Machine Learning](#)

Never miss a tutorial: Thanks you sir. So can you tell me sir what function to be use to have a multiple prediction? It will be very much appreciated.



Picked for you  **Jason Brownlee** February 1, 2019 at 5:30 am #

REPLY ↗

 Almost any other classification algorithm.
How to Run Your First Classifier in Weka

 **jack** February 1, 2019 at 7:19 am #
How to Save Your Machine Learning Model and Make Predictions in Weka
I trained a very big dataset with 1gb size but t

REPLY ↗

 How to Perform Feature Selection With Machine Learning Data in Weka
Jason Brownlee February 4, 2019 at 7:25 am

 The size of the model is proportional to the number of examples in the dataset.
How To Load CSV Machine Learning Data in Weka

 Weka Machine Learning Mini-Course
jack February 5, 2019 at 11:30 pm #

I also have this problem. I created the model but my test dataset have some extra attributes and weka uses InputMappedClassifier, but it retrains the model instead of just testing it. why is this happening?

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Jason Brownlee February 6, 2019 at 7:46 am #

REPLY ↗

>> SEE WHAT'S INSIDE the new data separately to have identical structure to the training dataset, e.g. in excel or a text editor?

 **Dirlene** February 8, 2019 at 8:55 am #

REPLY ↗

Hello Jason,

I really need your help.

I followed the tutorial steps to make predictions on weka. However, an error occurs:
problem evaluating classifier: class index is negative (not set)!

What should I do to correct the error?

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REPLY ↗

Never miss a tutorial

Brownlee February 8, 2019 at 2:06 pm #



not ideas:

Perhaps the dataset was not loaded correctly?

Perhaps the class variable was not specified?

Picked for you:[How to Run Your First Classifier in Weka](#)

REPLY ↗

Dirlene February 9, 2019 at 7:28 am #

[Thank you,
How to Save Your Machine Learning
Model and Make Predictions in Weka](#)

X



I'm working with prediction of evasion in distance education. I created a model with RandomForest during training, and when I use the model to make predictions, it classifies. I used to test the model is similar to the one used in the repeated the entire process, but there was no change.

[How To Load CSV Machine Learning Data](#)

X

in Weka
results:

==== Confusion Matrix ===

[Weka Machine Learning Mini-Course](#)

X

<-- Classified as

0 | a = SIM

109 0 | b = NAO

Thanks.
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REPLY ↗



Jason Brownlee February 10, 2019 at 9:36 am #

>> SEE WHAT'S INSIDE

Sorry, I don't follow. What is the problem you are having exactly?



mr February 12, 2019 at 8:17 pm #

REPLY ↗

Is the order of rows important in a dataset? can I put all the rows with class "A" first and all the rows with class "B" next?



Jason Brownlee February 13, 2019 at 7:57 am #

REPLY ↗

It can be for LSTMs and for SGD. It really

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Often, when fitting a model we want to shuffle the rows each epoch to avoid learning any ordering.

Never miss a tutorial:



Nouf February 12, 2019 at 9:35 pm #

REPLY ↗

Picked for you:

Hello Jason,

Thank you for sharing this knowledge with us.

 [How to Run Your First Classifier in Weka](#)
The question, I am beginner in WEKA and I have go through the steps above, I have read that the test set should have the same number of attributes as the training set, but how it would be possible knowing that I am working on tweets and the word vector would be different.



[How to Save Your Machine Learning Model and Make Predictions in Weka](#)
Kind assistance is highly appreciated.



[How to Perform Feature Selection With Machine Learning Data in Weka](#)
Jason Brownlee February 13, 2019 at 7:58 am



You would encode the text to the same le vocab.
[How To Load CSV Machine Learning Data in Weka](#)



ashraf December 13, 2019 at 8:21 pm #
[Weka Machine Learning Mini-Course](#)

Can WEKA be used to make two predictions on a given set of data?

Generally, a machine learning system would only make a single prediction among available classes (classification) or predict a single real valued number (regression) based on the given set of features for instance.

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Would it be possible to train a system in WEKA to make two predictions for a given sample?

The [Machine Learning with Weka EBook](#) is Although this question could be useful in many angles. A particular use case I would like to use this where you'll find the **Really Good** stuff. functionality is predicting an (x,y) coordinate given a set of features of an image. In here, x and y are predicted.

[>> SEE WHAT'S INSIDE](#) ability to do this?

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Jason Brownlee December 14, 2019 at 6:15 am #

REPLY ↗

I don't believe weka supports multiple output prediction problems.



sam February 19, 2019 at 2:12 pm #

REPLY ↗

i want to predict mental health using weka .i understood these steps but dont know how to create file with some attributes.can u please guide me on that.

[Start Machine Learning](#)

Never miss a tutorial:**Jason Brownlee** February 20, 2019 at 7:50 am #

REPLY ↗



Share this post on social media or forward it to work will help:

<http://machinelearningmastery.com/how-to-define-your-machine-learning-problem/>**Picked for you:**[How to Run Your First Classifier in Weka](#)**nuwan** February 21, 2019 at 4:46 pm #

REPLY ↗

i can use that model in r

[How to Save Your Machine Learning Model and Make Predictions in Weka](#)**Jason Brownlee** February 22, 2019 at 6:12 am #[How to Perform Feature Selection With Great! Machine Learning Data in Weka](#)[How To Load CSV Machine Learning Data in Weka](#)**tensor** February 22, 2019 at 8:50 pm #

Are you familiar with Tensorflow? Can I train a

model in weka?

[Weka Machine Learning Mini-Course](#)**Start Machine Learning**You can master applied Machine Learning
without math or fancy degrees.Find out how in this *free* and *practical* course. Email Address**START MY EMAIL COURSE****Jason Brownlee** February 23, 2019 at 6:31 am #

REPLY ↗

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Not that I have seen.

The [Machine Learning with Weka](#) EBook is
where you'll find the **Really Good** stuff.

>> SEE WHAT'S INSIDE 3:04 pm #

REPLY ↗

hi jason,

can i load that saved model in r.

thank you

**Jason Brownlee** March 5, 2019 at 6:37 am #

REPLY ↗

Yes, here is an example:

<https://machinelearningmastery.com/finalize-machine-learning-models-in-r/>**Start Machine Learning**

Never miss a tutorial:

Tharanga March 5, 2019 at 2:06 pm #

REPLY ↗



No

a saved model.can i load in java.

Picked for you:

How to Save Your Machine Learning Model and Make Predictions in Weka



Jason Brownlee March 5, 2019 at 2:23 pm #

REPLY ↗

Sorry, I don't have an example of loading models in Java.



How to Save Your Machine Learning Model and Make Predictions in Weka



Tharanga March 5, 2019 at 2:29 pm #



How to Perform Feature Selection With Machine Learning Data in Weka



Jason Brownlee March 6, 2019 at 10:09 pm #

How To Load CSV Machine Learning Data in Weka

You may, I don't know sorry.



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Tharanga March 6, 2019 at 10:09 pm #

ok thank you.

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Tharanga March 5, 2019 at 2:06 pm #

REPLY ↗

>> SEE WHAT'S INSIDE



Sanjeev Das March 19, 2019 at 8:56 am #

REPLY ↗

Hi Jason,

I used the weights and thresholds shown by weka for multilayer perceptron (MLP) in my custom C code to do the prediction on the same training data.

However, Weka's result does not match to my C code implementation results.

In my C code, I am using Feedforward model (MLP), where the weights and thresholds are obtained from the Weka trained model.

The computation at each node is simple as shown below:

Sum_node = threshold;

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```
for( i = 0 ; i < Num_Input ; i++ )
    Sum_node += Input[i] * Weight[i][j] ;
    hidden_node = 1/(1 + exp(-Sum_node)) ;
```



Could you please tell me if Weka has different way of implementation for testing a new data?

Picked for you:



[How to Run Your First Classifier in Weka](#)

Jason Brownlee March 19, 2019 at 9:05 am #

REPLY ↗

It may have differences in the implementation.



[You can check the source code, it is open source.](#)

[How to Save Your Machine Learning](#)

Model and Make Predictions in Weka



[How to Perform Feature Selection With](#)

Machine Learning Data in Weka

[How to use Weka in Python?](#)



[How To Load CSV Machine Learning Data](#)

in Weka

Jason Brownlee April 12, 2019 at 7:44 am #



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I don't have an example, sorry.

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REPLY ↗



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Leandro April 16, 2019 at 1:36 am #

The [Machine Learning with Weka](#) EBook is
where you find the **Really Good** stuff.

Do you ...
[>> SEE WHAT'S INSIDE](#) of required input data per a weka classifier?



Jason Brownlee

April 16, 2019 at 6:52 am #

REPLY ↗

Good question, I answer it here:

<https://machinelearningmastery.com/much-training-data-required-machine-learning/>



Abhishek Santhanam

May 7, 2019 at 4:14 pm #

REPLY ↗

First of all thanks for this great article, was very helpful. Could you please help me as to how to do the same in java(in eclipse IDE) using the weka.jar library

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Never miss a tutorial:**Jason Brownlee** May 8, 2019 at 6:42 am #

REPLY ↗



May 8, 2019 at 6:42 am #

I don't have many examples in Java.

Picked for you:**Art** May 28, 2019 at 5:53 am #

How to Run Your First Classifier in Weka

REPLY ↗

**How to Save Your Machine Learning Model and Make Predictions in Weka****How to Perform Feature Selection With Machine Learning Data in Weka****How To Save Machine Learning Data in Weka****Jason Brownlee** May 28, 2019 at 8:21 am #

Perhaps start here:

<https://machinelearningmastery.com/start-here/#weka>**Weka Machine Learning Mini-Course****getaneh** July 9, 2019 at 11:58 pm #

REPLY ↗

Loving the Tutorials?

Thank you so much!

I got very good knowledge from you about How to Save Machine Learning Model and Make Predictions in Weka dear if it is possible you send for how to do predication for all my dataset by using this result where you'll find the **Really Good** stuff.

>> SEE WHAT'S INSIDE

**Jason Brownlee** July 10, 2019 at 8:11 am #

REPLY ↗

Sorry, I cannot make predictions for you.

**Awal** July 22, 2019 at 10:53 pm #

REPLY ↗

Please can a use a saved model from explorer in the experimenter.

**Jason Brownlee** July 23, 2019 at 8:03 am #

REPLY ↗

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I don't think so, off the cuff.
Never miss a tutorial:



Lei September 19, 2019 at 9:25 am #

REPLY ↩

Picked for you:

I used WEKA a few years ago and I like a lot. Weka IS the machine learning software to go to years before Python and R.

[How to Run Your First Classifier in Weka](#)

you share any light why WEKA is not as popular as Python/R today?



[How to Save Your Machine Learning Model and Make Predictions in Weka](#)
Jason Brownlee September 19, 2019 at 1:49 pm #



I agree!

[How to Perform Feature Selection With Weka](#)

don't know. Perhaps a bias against GUIs? or Java Machine Learning Data in Weka



It's madness because you can be so productive in the machine learning/model-building/selection process.

[How To Load CSV Machine Learning Data in Weka](#)



anu October 17, 2019 at 4:54 am #
[Weka Machine Learning Mini-Course](#)

hello,

I am supposed to use weka on the Linux system to calculate unweighted average recall from confusion matrix can i know the script to do it

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where you'll find the [Really Good stuff](#)

Jason Brownlee October 17, 2019 at 6:41 am #

REPLY ↩

>> SEE WHAT'S INSIDE / scripts for Weka. I only show how to use the GUI interface.



anu October 17, 2019 at 7:38 pm #

REPLY ↩

oh okay, thanks soo much! I have to work on output predictions is there any tutorial which explains output predictions



Jason Brownlee October 18, 2019 at 5:49 am #

REPLY ↩

The above tutorial is exactly that topic.

[Start Machine Learning](#)

Never miss a tutorial:

Michael November 18, 2019 at 8:45 pm #

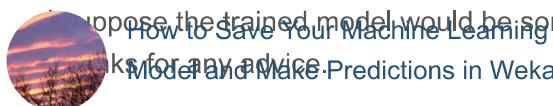
REPLY ↗



Thanks for the great article. I was wondering if it is possible to implement a trained model outside of the Picked for you:

 For example, if I use J48 on a particular data set I can then use the 'visualize decision tree' option to use the [How to Run Your First Classifier in Weka](#) as if statements in another platform on a different data set.

Can I do something similar for other algorithms like Random Forest, SVM's, etc.?



Suppose the trained model would be some equation/s with coefficients generated by the training data? Thanks for any advice

[How to Save Your Machine Learning Model and Make Predictions in Weka](#)



How to Perform Feature Selection With Machine Learning in Weka

Jason Brownlee November 19, 2019 at 7:41 am #

Yes, perhaps via the Java API?



How To Load CSV Machine Learning Data in Weka



Hassan November 24, 2019 at 9:25 pm #

Weka Machine Learning Mini-Course

Hi Jason,

I have a csv file included 32 attributes of tweet that each attribute is a column of this file. I have a Nomber_of_retwweet's attribute as production of tweet's retweet. How can achieve a good response for protection tweet's retweet?

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Jason Brownlee November 25, 2019 at 6:29 am #

REPLY ↗

>> SEE WHAT'S INSIDE

id.

If you're asking how to work through your dataset, I recommend this process:

<https://machinelearningmastery.com/start-here/#process>



Maryam December 3, 2019 at 6:40 am #

REPLY ↗

Hi, Thanks alot for valuable comment and tutorial.

I want to know is there any way to build different models to be able to test all of them on the testing data? (for example use 10-fold CV and repeat it 20 times to have 200 models to be tested 200 times on testing data)!

[Start Machine Learning](#)

Never miss a tutorial!**Jason Brownlee**

December 3, 2019 at 1:31 pm #

REPLY ↗



yo! I'm up to the Weka experimenter for this purpose.

Perhaps start with this tutorial:

<https://machinelearningmastery.com/regression-machine-learning-tutorial-weka/>[How to Run Your First Classifier in Weka](#)**Maryam Ghanbari** December 4, 2019 at 4:25 am #

REPLY ↗

Hi I have another question too. I have data of healthy and patient people. But data contain repeated scans for each subject (It means for example belong to patient 2 and so on). To do the CV, a subject possible to do it in Weka when I want to do 10-fold CV?

[How to Perform Feature Selection With Machine Learning Data in Weka](#)

Jason Brownlee December 4, 2019 at 5:50 am #

[How To Load CSV Machine Learning Data in Weka](#)

Yes, it sounds like each patient should group

[Weka Machine Learning Mini-Course](#)**Maryam Ghanbari** December 4, 2019 at 6:04 am #

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>> SEE WHAT'S INSIDE**nlee** December 4, 2019 at 1:53 pm #

REPLY ↗



You might have to write some custom code to group the subjects.

**Maryam** December 5, 2019 at 1:14 am #

Thanks for your answer.

**Jason Brownlee** December 5, 2019 at 6:42 am #

You're welcome.

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results can up all the same classification, which is probably wrong.

Never miss a tutorial:

Could you help me with what possibly might go wrong with me?

Thank you!



Picked for you:



Jason Brownlee April 29, 2020 at 12:07 pm #

[How to Run Your First Classifier in Weka](#)

You're welcome.

REPLY ↗

Perhaps confirm that the rows you are making predictions on are all different and that you expect different predictions for each?

[How to Save Your Machine Learning Model and Make Predictions in Weka](#)



Cassie April 29, 2020 at 1:55 pm #
[How to Perform Feature Selection With Machine Learning Data in Weka](#)

I did, I even copy and paste the original datas

However, I did use different dataset get 2 different results

Is that means the problem is my test data?

[How To Load CSV Machine Learning Data in Weka](#)



Jason Brownlee April 30, 2020 at 6:32 am #
[Weka Machine Learning Mini-Course](#)

That is odd. Perhaps try making predictions on the training data to confirm the model is working correctly?

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Cassie April 30, 2020 at 10:32 am #
where you'll find the **Really Good** stuff.

REPLY ↗

Today I figured out why. I used my dataset as .csv file. Those two different results are from
>> SEE WHAT'S INSIDE working on three models at the same time so it was my mistake).

Anyway, the issue has been resolved by converting the csv file to .arff and change all data type to nominal.

Thanks very much for your time!!

Have a wonderful day!



Jason Brownlee April 30, 2020 at 11:38 am #

REPLY ↗

I'm happy to hear that you resolved your issue!

Priyanka May 8, 2020 at 7:06 pm #

[Start Machine Learning](#)

Never miss a tutorial: Hi can you tell me please how extract all the TP and FP values from a data set. I did once and I forgot. I urgently need help and I want a csv file.



Picked for you: Jason Brownlee May 9, 2020 at 6:11 am #

REPLY ↗

 TP and FP are calculated based on your predictions. Weka reports these values on a classification dataset for your model in the Explorer.

 How to Save Your Machine Learning Model and Make Predictions in Weka May 19, 2020 at 12:51 am #

REPLY ↗

Hey Jason,

 How to Perform Feature Selection With Machine Learning Data in Weka I wanted to ask if we don't replace the data with "?" and a different dataset with similar attributes), would that change anything?

I mean, the "?" was for us to see how well the model per-

 Model How Different CSV Machine Learning Data in Weka I think!

 Weka Machine Learning Mini-Course

Jason Brownlee May 19, 2020 at 6:08 am #

REPLY ↗

Some models will error, expecting inputs to be numbers.

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Yes, imputing missing values makes models act differently, better or worse based on the type of imputation. The [Machine Learning with Weka](#) EBook is where you'll find the **Really Good** stuff.

>> SEE WHAT'S INSIDE

 Dinesh October 20, 2020 at 6:46 pm #

REPLY ↗

Hi,

I am making predictions for a particular dataset, when I use the percentage split in the 'Test option' and try to save the prediction result into a csv format, the obtained result contains only predicted test dataset but not the training data(predicted). I would like to know if it is possible to obtain the prediction result for both training and test when I use 'Percentage Split'.

Thank you for your time.



Jason Brownlee October 27, 2020 at 6:42 am #

REPLY ↗

I don't believe so, at least not through the



Never miss a tutorial:

REPLY ↩

Hi Jason,

Picked for you:

Thank you for the reply. I will try to run through command line to see if that will return me the training
Handed result.



[How to Save Your Machine Learning Model and Make Predictions in Weka](#)

And also, when select attributes using PCA my output screen returns with the selected attributes as
below,



[How to Save Your Machine Learning Model and Make Predictions in Weka](#)

My question is why is that I am not able to get the
possible to retaining me entire results? if so can



[How to Perform Feature Selection With
Machine Learning Data in Weka](#)

Thank you in advance.



[How To Load CSV Machine Learning Data
in Weka](#) **Jason Brownlee** October 28, 2020

I suspect your IDE or notebook is
<https://machinelearningmastery.com/faq/tips-weka-machine-learning-mini-course/>

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Dhinesh October 28, 2020 at 4:35 pm #

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Hello Jason,

The [Machine Learning with Weka EBook](#) is
Thank you for your comment, I will try running through the command line.
where you'll find the **Really Good** stuff.

>> SEE WHAT'S INSIDE



Jason Brownlee October 29, 2020 at 7:56 am #

You're welcome.



Gaurav November 7, 2020 at 7:58 pm #

REPLY ↩

Hello Jason,

I had one query. Is it possible to save multiple models at the same time in the WEKA Classifier toolbox. For example, on my dataset, I wish to apply all kinds of algorithms, i.e., (Function based, lazy learning based, meta learning and tree based algorithms).

So in total for the same dataset and subset selection, I
any way I can save all these 10-15 models for future re

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saved at a time?
Never miss a tutorial:

Thank you



Picked for you: Jason Brownlee November 8, 2020 at 6:40 am #

 How to Run Your First Classifier in Weka
I recommend using the experimenter interface:
<https://machinelearningmastery.com/compare-performance-machine-learning-algorithms-weka/>

REPLY ↗

 How to Save Your Machine Learning Model and Make Predictions in Weka
tas March 23, 2021 at 5:27 pm #

 hello I need a help from you Jason
How to Perform Feature Selection With training a model in Weka and importing data from Machine Learning Data in Weka
xampp where data will be collected from the web app
can I connect a web service with weka? what is your re predictions and sent it to my web app back?
How To Load CSV Machine Learning Data in Weka

 Jason Brownlee March 24, 2021 at 5:50 am #
Weka Machine Learning Mini-Course

Sorry, I don't know about using Weka in a web service.

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GAB MON April 28, 2021 at 10:11 pm #

REPLY ↗

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where You'll find lots of Really Good stuff.

>> SEE WHAT'S INSIDE

 Jason Brownlee April 29, 2021 at 6:27 am #

REPLY ↗

You're welcome.



Ramon September 6, 2021 at 1:22 pm #

REPLY ↗

Anytime i open a saved model it didn't display result. please what actually is the problem

 Adrian Tam September 7, 2021 at 6:01 am #

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Never miss a tutorial:
Do you have any error message? It would be easier to help if you describe your situation in more detail.



Picked for you:
Leave a Reply

 How to Run Your First Classifier in Weka

 How to Save Your Machine Learning Model and Make Predictions in Weka

 How to Perform Feature Selection With Machine Learning Data in Weka

 How To Load CSV Machine Learning Data in Weka

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Name (required)

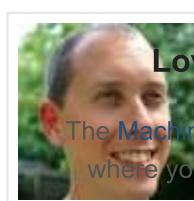
Email (will not be published) (required)

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and I **help developers** get results with **machine learning**.
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