



Cross Validated is a question and answer site for people interested in statistics, machine learning, data analysis, data mining, and data visualization. It's 100% free, no registration required.

Sign up



Is there a way to disable the parameter tuning (grid) feature in CARET?

CARET will automatically use a pre-specified tuning grid to build various models before selecting a final model, and then training the final model on the full training data. I can supply my own tuning grid with only one combination of parameters. However even in this case, CARET "selects" the best model among the tuning parameters (even though there is only one in this case), and then fits the final model to all the training data. This is an extra step I'd like to avoid.

How do I simply skip the model search step across variations in the tuning grid and force CARET to build on all the training data (other than calling the underlying model library directly)?

r caret

share improve this question

edited Dec 11 '12 at 9:17



whuber ♦

118k 12 211 420

asked Feb 27 '12 at 19:40



Quant Guy

938 10 28

add a comment

3 Answers

active oldest

votes

The best way would be to explicitly supply the tuneGrid dataframe. For instance, random forest has only one tuning parameter, 'mtry', which controls the number of features selected for each tree.

To set mtry at a specific value, you might choose the randomForest default (?randomForest) do this:

```
model <- train(x = X, y = Y, method = 'rf', tuneGrid = data.frame(.mtry = M))
```

where M is the one value of the tuning parameter you wish to use.

for multiple tuning parameters do this:

```
tuneGrid = data.frame(.par1 = P1, .par2 = P2, .par3 = P3)
```

share improve this answer

answered Jul 11 '12 at 21:52



Brent

69 1 2

Welcome to our site, Brent! Thanks for following up with this old question. — whuber ♦ Jul 12 '12 at 12:36

The suggestion below `method="none"` is the better solution. — topepo May 8 '14 at 12:51

add a comment

You can specify `method="none"` in `trainControl`. For example:

```
train(Species ~ ., data=iris, method="rf", tuneGrid=data.frame(mtry=3),  
      trControl=trainControl(method="none"))
```

I'm not sure when this was implemented.

share improve this answer

answered May 1 '14 at 0:00



Peyton

171 1 5

add a comment

asked 3 years ago

viewed 3009 times

active 1 year ago

Get the **weekly newsletter!**

• Top questions and answers

• Important announcements

• Unanswered questions

Sign up for the newsletter

see an **example newsletter**

Related

- 6 Feature selection and parameter tuning with caret for random forest
- 5 R/caret: train and test sets vs. cross-validation?
- 3 Understanding the output of C5.0 classification model using the CARET package
- 5 R - how to let glmnet choose lambda range when using caret?
- 0 Caret retraining of neural network after finding optimal parameters?
- 1 Confusion between caret randomForest predict() results and reported model performance
- 0 Feature Importance in each fold and repeat after repeated cross validation in caret
- 0 Caret - Changing tuneGrid gives different results for same parameters
- 0 Feature selection + classification in Caret
- 1 Problem in passing parameter 'maximize' through to xgbTree from caret train function

Hot Network Questions

- How to prove this inequality
- A king has n children, at least one of them is a daughter. What's the probability that all of them are daughters?

▲
1
▼
I don't think it is possible (at least it was not possible as of a few versions ago). One can reduce the performance impact by setting up just a single resampling partition in training data (but caret would still train a model twice)

This sounds like a useful feature to have so I would ping the author of the package.

share improve this answer

answered Mar 6 '12 at 21:58



Yevgeny

1,116 6 7

Sorry this answer is obsolete now – smci Jul 16 at 9:43

add a comment

Your Answer

Sign up or **log in**

Post as a guest

 Sign up using Google

 Sign up using Facebook

 Sign up using Email and Password

Name


Email


required, but never shown


Post Your Answer


By posting your answer, you agree to the [privacy policy](#) and [terms of service](#).


Not the answer you're looking for? Browse other questions tagged [r](#) [caret](#) or [ask your own question](#).


 Why do i get different results from two servers that located in the same destination network?

 How can I quickly check if my sprite tiles well?


 Its or Their to refer to a company?


 Is it normal to spend as much, if not more, time writing tests than actual code?


 Algorithm to transform one word to another through valid words


 How to take a screenshot of the same precise region with a key combo?


 Play the elimination game

 Has there ever been a plane not controlled from the nose?

 Is it plausible to have two written forms of one spoken language that are so different as to be indecipherable?

 Are we increasing the gravity of Earth with our population?

 Can faculty do research during a labor strike?

 Should date pickers for meetings offer the ability to schedule a meeting for 0 minutes?

[more hot questions](#)

 question feed

[tour](#)

[help](#)

[blog](#)

[chat](#)

[data](#)

[legal](#)

[privacy policy](#)

[work here](#)

[advertising info](#)

[mobile](#)

[contact us](#)

[feedback](#)

[TECHNOLOGY](#)

[LIFE / ARTS](#)

[CULTURE /
RECREATION](#)

[SCIENCE](#)

[OTHER](#)

Stack Overflow	Programmers	Database Administrators	Photography	English Language & Usage	Mathematics	Stack Apps
Server Fault	Unix & Linux	Drupal Answers	Science Fiction & Fantasy	Skeptics	Cross Validated (stats)	Meta Stack Exchange
Super User	Ask Different (Apple)	SharePoint	Graphic Design	MI Yodeya (Judaism)	Theoretical Computer Science	Area 51
Web Applications	WordPress Development	User Experience	Movies & TV	Travel	Physics	Stack Overflow Careers
Ask Ubuntu	Geographic Information Systems	Mathematica	Seasoned Advice (cooking)	Christianity	MathOverflow	
Webmasters	Electrical Engineering	Salesforce	Home Improvement	Arqade (gaming)	Chemistry	
Game Development	Android Enthusiasts	ExpressionEngine® Answers	Personal Finance & Money	Bicycles	Biology	
TeX - LaTeX	Information Security	more (13)	Academia	Role-playing Games	more (5)	
			more (9)	more (21)		

site design / logo © 2015 Stack Exchange Inc; user contributions licensed under [cc by-sa 3.0](#) with [attribution required](#)

rev 2015.10.13.2885