CheatSheet - Model Evaluation

Command	Syntax	Description	Example
tidymodels	`library(tidymodels)`	`tidymodels` is a collection of packages for modeling and machine learning using tidyverse principles.	`library(tidymodels)`
linear_reg	`linear_reg()`	`linear_reg()` specifies a linear regression model by calling the linear_reg() function.	`linear_reg() %>% set_engine(engine = "lm")`
vfold_cv()	`vfold_cv()`	`vfold_cv()` With cross validation, you can have as many as K-folds, so you can build K different models.	`vfold_cv(train_data, v = 10)`
Regularization	`linear_reg(penalty =0.1, mixture =0)`	• Ridge (L2) regularization • Lasso (L1) regularization • Elastic net (mix of L1 and L2) regularization penalty: is the value of lambda. mixture is the proportion of L1 penalty. For ridge regression, specify Mixture = 0. This means there is no L1 penalty and only the L2 penalty is used. For lasso regression, you would use mixture = 1.	`linear_reg(penalty =0.1, mixture= 0) %>% set_engine("glmnet")` `linear_reg(penalty =0.1, mixture= 1) %>% set_engine("glmnet")`

grid_regular()	`grid_regular(x, ..., levels = 3, original = TRUE, filter = NULL)`	`grid_regular` function create grids of tuning parameters. Random and regular grids can be created for any number of parameter objects. x A param object, list, or parameters. ... One or more param objects (such as mtry() or penalty()). None of the objects can have unknown() values in the parameter ranges or values. levels An integer for the number of values of each parameter to use to make the regular grid. l original should the parameters be in the original units or in the transformed space (if any)? filter should the parameters be filtered prior to generating the grid. size A single integer for the total number of parameter value combinations returned for the random grid.	`grid_regular(levels = 50, penalty(range = c(-3, 0.3)))`
show_best()	`show_best(x, metric = NULL, n = 5, ...)`	`show_best` function, displays the top sub-models and their performance estimates.	`show_best(lasso_grid, metric = "rmse")`

Author(s)

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Changelog

Date	Version	Changed by	Change Description
2021-08-06	1.0	Amrutha Rao	Initial Version