Package ‘discrim’

June 23, 2022

Title Model Wrappers for Discriminant Analysis

Version 1.0.0


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BugReports https://github.com/tidymodels/discrim/issues

Depends parsnip (>= 0.2.0), R (>= 3.4)

Imports dials, purrr, rlang, tibble, withr

Suggests covr, dplyr, earth, ggplot2, klaR, knitr, MASS, mda, mlbench, modeldata, naivebayes, rmarkdown, sda, sparsediscrim (>= 0.3.0), spelling, testthat (>= 3.0.0), xml2

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RooxygenNote 7.2.0.9000

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NeedsCompilation no

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frac_common_cov

Parameter objects for Regularized Discriminant Models

Description

discrim_regularized() describes the effect of frac_common_cov() and frac_identity(). smoothness() is an alias for the adjust parameter in stats::density().

Usage

frac_common_cov(range = c(0, 1), trans = NULL)
frac_identity(range = c(0, 1), trans = NULL)
smoothness(range = c(0.5, 1.5), trans = NULL)

Arguments

range A two-element vector holding the defaults for the smallest and largest possible values, respectively.
trans A trans object from the scales package, such as scales::log10_trans() or scales::reciprocal_trans(). If not provided, the default is used which matches the units used in range. If no transformation, NULL.

Details

These parameters can modulate a RDA model to go between linear and quadratic class boundaries.

Value

A function with classes "quant_param" and "param"

Examples

frac_common_cov()
parabolic

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parabolic  Parabolic class boundary data

Description

Parabolic class boundary data

Details

These data were simulated. There are two correlated predictors and two classes in the factor outcome.

Value

parabolic  a data frame

Examples

data(parabolic)

library(ggplot2)
ggplot(parabolic, aes(x = X1, y = X2, col = class)) +
  geom_point(alpha = .5) +
  theme_bw()
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