

Package ‘ensModelVis’

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Title Visualisations for Model Ensembles

Version 0.1.0

Description Displays for model fits of multiple models and their ensembles. For classification models, the plots are heatmaps, for regression, scatterplots.

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Encoding UTF-8

RoxygenNote 7.2.0

Imports dplyr, forcats, ggplot2, magrittr, rlang, tidyr

URL <https://github.com/domijan/ensModelVis>

BugReports <https://github.com/domijan/ensModelVis/issues>

Suggests discrim, glmnet, kernlab, knitr, MASS, nnet, ranger, rmarkdown, stacks, stringr, tidymodels

VignetteBuilder knitr

NeedsCompilation no

Author Katarina Domijan [aut, cre] (<<https://orcid.org/0000-0002-4268-2236>>)

Maintainer Katarina Domijan <domijank@tcd.ie>

Repository CRAN

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plot_ensemble	<i>Draws a plot for model predictions of ensembles of models. For classification the plot is a heatmap, for regression, scatterplot.</i>
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Description

Draws a plot for model predictions of ensembles of models. For classification the plot is a heatmap, for regression, scatterplot.

Usage

```
plot_ensemble(  
  truth,  
  tibble_pred,  
  incorrect = FALSE,  
  tibble_prob = NULL,  
  order = NULL,  
  facet = FALSE  
)
```

Arguments

truth	The y variable. In regression this is numeric vector, in classification this is a factor vector.
tibble_pred	A data.frame of predictions. Each column corresponds to a candidate model.
incorrect	If TRUE, for observations that were correctly classified by all models, remove all but a single observation per class. Classification only.
tibble_prob	If not NULL, a data.frame with same column names as tibble_pred. Applies transparency based on the predicted probability of the predicted class. Classification only.
order	default ordering is by accuracy (classification) or RMSE (regression). Can submit any other ordering e.g. AUC, which should be a data.frame with same column names as tibble_pred.
facet	whether to facet the plots by model (regression only).

Value

a ggplot

Examples

```
data(iris)  
if (require("MASS")){  
  lda.model <- lda(Species~., data = iris)  
  lda.pred <- predict(lda.model)  
}
```

```
if (require("ranger")){
  ranger.model <- ranger(Species~., data = iris)
  ranger.pred <- predict(ranger.model, iris)
}

library(ensModelVis)

plot_ensemble(iris$Species,
  data.frame(LDA = lda.pred$class,
  RF = ranger.pred$predictions))

plot_ensemble(iris$Species,
  data.frame(LDA = lda.pred$class,
  RF = ranger.pred$predictions),
  incorrect= TRUE)

if (require("ranger")){
  ranger.model <- ranger(Species~., data = iris, probability = TRUE)
  ranger.prob <- predict(ranger.model, iris)
}

plot_ensemble(iris$Species,
  data.frame(LDA = lda.pred$class,
  RF = ranger.pred$predictions),
  tibble_prob = data.frame(LDA = apply(lda.pred$posterior, 1, max),
  RF = apply(ranger.prob$predictions, 1, max)))
```

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