Package 'textmatch'

March 25, 2019

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Title Toolkit for Matching Textual Data and Evaluating Textual Similarity
Version 0.0.0.9000
Description What the package does (one paragraph).
Depends R (>= 3.5.2)
License What license is it under?
Encoding UTF-8
LazyData true
RoxygenNote 6.1.1.9000
Imports dplyr, data.table, quanteda
Suggests knitr, rmarkdown
VignetteBuilder knitr
R topics documented:
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get_pair_distances Similarity and distance computation between documents or features
Description
These functions compute distance matrices from a text representation where each row is a document and each column is a feature to measure distance over based on treatment indicator \mathbf{Z}
Usage

get_pair_distances(dat, Z, include = c("cosine", "jaccard", "euclidean",
 "mahalanobis", "propensity"), exclude = NULL, docnames = NULL,

verbose = FALSE)

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Arguments

Z A logical or binary vector indicating treatment and control for each unit in the

study. TRUE or 1 represents a treatment unit, FALSE of 0 represents a control

unit.

docnames A vector of document names equal in length to the number of documents

x a valid **quanteda** dfm object

Value

A matrix showing pairwise distances for all potential matches of treatment and control units under various distance metrics

get_similarity_scores This function calculates an input character vector's similarity matrix according to the measures contained in the predictive model.

Description

This function calculates an input character vector's similarity matrix according to the measures contained in the predictive model.

Usage

```
get_similarity_scores(x)
```

Arguments

x A character vector where each element is a document

Value

A data frame of rows (n * n-1) and columns 16; each column is one of the constituent similarity measures

textmatch This function runs the main ML model as specified in Mozer et al. (2018)

Description

This function runs the main ML model as specified in Mozer et al. (2018)

Usage

```
textmatch(x, outcome = "matrix")
```

Arguments

x A character vector where each element is a document

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Value

An n by n matrix where n is the length of parameter x. Each entry is a standardized similarity score.

Examples

```
textmatch(c("I am a dog", "I am a cat", "The rain in Spain falls mainly on the plain."),
  outcome = "matrix")
```

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