

Package ‘ccaR’

March 27, 2022

Type Package

Title Calculates the Corrected Covered Area (CCA) Index

Version 0.1.0

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Description Calculates the corrected covered area CCA. The measure for assessing the overall degree of overlap in an OOSR.

License GPL-2

Encoding UTF-8

LazyData FALSE

Imports ggplot2,
readxl,
utils

RoxygenNote 7.1.1

Depends R (≥ 2.10)

VignetteBuilder knitr

Suggests markdown,knitr

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cca	<i>Calculates the Corrected Covered Area (CCA) Index</i>
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Description

This package calculates the Corrected Covered Area (CCA) index. The measure for assessing the overall degree of overlap in an OOSR. It is taking as input the citation matrix.

Usage

```
cca(cm)
```

Arguments

cm A dataframe for the citation matrix

Value

res

Examples

```
DATASET<-readxl::read_excel(system.file('extdata','cca.xlsx', package = 'ccaR'))  
  
cca_table<-cca(DATASET)
```

cca2

Calculates the total Corrected Covered Area (CCA) Index

Description

This package calculates the Corrected Covered Area (CCA) index. The measure for assessing the overall degree of overlap in an OOSR. It is taking as input the citation matrix.

Usage

```
cca2(cm)
```

Arguments

cm A dataframe for the citation matrix

Value

res

Examples

```
DATASET<-readxl::read_excel(system.file('extdata','cca.xlsx', package = 'ccaR'))  
  
cca_table<-cca(DATASET)
```

dt	<i>The dataset from the publication</i>
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Description

The dataset contaoineing the publications

Usage

```
data(dt)
```

Format

A data frame with 14 rows and 6 variables:

Chasan2014 The publication of Chasan2014

Gilinsky2015 The publication of Gilinsky2015

Guo2016 The publication of Guo2016

Middleton2014 The publication of Middleton2014

Morton2014 The publication of Morton2014

Peacock2014 The publication of Peacock2014

Source

<https://hsda.med.auth.gr/>

heat_cca	<i>Plots the cca heatmap</i>
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Description

This function plots the cca heatmap. The tiles within the triangular matrix contain color-coded data that demonstrate the degree of overlap between pairs of reviews using the corrected covered area (CCA) measure. It is taking as input the citation matrix, the font size of the text in the tiles and the color used in the heatmap.

Usage

```
heat_cca(cm, fontsize = 5, chroma = "#527e11")
```

Arguments

cm	A dataframe for the citation matrix
fontsize	A number which controls the aesthetic of font size of the numbers in the tiles of the heatmap
chroma	The color of the heatmap

Value

heat_cca

Examples

```
DATASET<-readxl::read_excel(system.file('extdata','cca.xlsx', package = 'ccaR'))

heat_cca(DATASET, 3) +
  ggplot2::theme(
    plot.caption = ggplot2::element_text(size = 16, margin=ggplot2::margin(30,0,0,0)),
    legend.title = ggplot2::element_text(size = 16, face = "bold", vjust=4),
    legend.text = ggplot2::element_text(size = 16),
    legend.key.size = ggplot2::unit(1.0, "cm"),
    legend.title.align = 0.5,
    legend.text.align = 0.5,
    axis.text.x=ggplot2::element_text(size = 16),
    axis.text.y=ggplot2::element_text(size = 16),
    axis.title=ggplot2::element_blank(),
    axis.ticks=ggplot2::element_blank(),
    axis.line=ggplot2::element_blank(),
    panel.border=ggplot2::element_blank(),
    panel.grid.major.x=ggplot2::element_line(colour = "grey80", linetype = "dashed"))
```

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