Package 'correlationr'

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Type Package

Title Conduct Robust Correlations on Non-Normal Data

Version 0.1.0

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Description Allows you to conduct robust correlations on your non-normal data set. The robust correlations included in the package are median-absolute-deviation and median-based correlations. Li, J.C.H. (2022) <doi:10.5964/meth.8467>.

URL https://liqas.org/1-correlationr-package/, https://github.com/Aurora-UofM/correlationr

BugReports https://github.com/Aurora-UofM/correlationr/issues

License GPL-3

Encoding UTF-8

Depends R (>= 3.5)

RoxygenNote 7.3.2

LazyData true

Imports dplyr, stats

NeedsCompilation no

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rMAD *Median Absolute Deviation (MAD) Correlations*

Description

Performs a median-absolute-deviation correlation which is used to examine whether two continuous variables (X and Y) are linearly related using a deviate estimation, called the median absolute deviation.

Usage

```
rMAD(x, y)
```

Arguments

x	a continuous variable
y	a continuous variable

Value

a correlation value (r) that ranges from -1 to +1

Examples

```
rMAD(SwimLessons$Temp, SwimLessons$SwimTime)
```

rMED *Median Based (MED) Correlations*

Description

Performs a median based correlation which is used to examine whether two continuous variables (X and Y) are linearly related using a median correlation coefficient.

Usage

```
rMED(x, y)
```

Arguments

x	a continuous variable
y	a continuous variable

Value

a correlation value (r) that ranges from -1 to +1

Examples

```
rMED(SwimLessons$Temp, SwimLessons$SwimTime)
```

`SwimLessons` *Data collected for Swim Time*

Description

Contains four continuous variables.

Usage

```
SwimLessons
```

Format

A data frame with 200 rows and 4 variables:

Age The age of the person taking swim lessons

SwimTime The quantity of time the person spent swimming

Temp The temperature of the water during the swim lesson

UV The UV index during the swim lesson

Source

Created in-house to serve as an example dataset for the package correlationr.

Examples

```
data(SwimLessons)
```

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