

Package ‘quadraticSD’

May 9, 2026

Type Package

Title Visualizing the SD using a Quadratic Curve

Version 0.1.0

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Description Given a dataset, the user is invited to utilize the Empirical Cumulative Distribution Function (ECDF)

to guess interactively the mean and the mean deviation. Thereafter,

using the quadratic curve the user can guess the Root Mean Squared Deviation (RMSD) and visualize the standard deviation (SD).

For details, see Sarkar and Rashid (2019)<[doi:10.3126/njs.v3i0.25574](https://doi.org/10.3126/njs.v3i0.25574)>,

Have You Seen the Standard Deviaton?, Nepalese Journal of Statistics, Vol. 3, 1-10.

License GPL-3

Encoding UTF-8

RoxygenNote 7.2.2

Imports shiny, ggplot2

NeedsCompilation no

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Repository CRAN

Date/Publication 2022-11-16 14:40:13 UTC

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data1	<i>data1: the namespace variable.</i>
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Description

the namespace variable that stores data provided by the user.

Usage

data1

Format

An object of class `numeric` of length 5.

runApp	<i>Visualizing the SD using a Quadratic Curve</i>
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Description

Given a dataset, the user is invited to utilize the Empirical Cumulative Distribution Function (ECDF) to guess interactively the mean and the mean deviation. Thereafter, using the quadratic curve the user can guess the Root Mean Squared Deviation (RMSD) and visualize the Standard Deviation (SD). For details, see Sarkar and Rashid (2019), Have You Seen the Standard Deviation?, Nepalese Journal of Statistics, Vol. 3, 1-10

Usage

```
runApp(data)
```

Arguments

`data` a data vector, ideally of a moderate size (say, 10), to be provided by the user. Adventurous users may increase the size.

Value

An interactive shiny application.

Examples

```
data <- c(12,13,15,17,20,21,23)
runApp(data)
#end of example
```

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