

# Package ‘quadraticSD’

November 16, 2022

**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.

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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.
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**Value**

An interactive shiny application.

**Examples**

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

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