

Package ‘shinyCLT’

July 23, 2025

Title Central Limit Theorem 'shiny' Application

Version 0.9.4

Description A 'shiny' application estimating the operating characteristics of the Student's t-test by Student (1908) <[doi:10.1093/biomet/6.1.1](https://doi.org/10.1093/biomet/6.1.1)>, Welch's t-test by Welch (1947) <[doi:10.1093/biomet/34.1-2.28](https://doi.org/10.1093/biomet/34.1-2.28)>, and Wilcoxon test by Wilcoxon (1945) <[doi:10.2307/3001968](https://doi.org/10.2307/3001968)> in one-sample or two-sample cases, in settings defined by the user (conditional distribution, sample size per group, location parameter per group, nuisance parameter per group), using Monte Carlo simulations Malvin H. Kalos, Paula A. Whitlock (2008) <[doi:10.1002/9783527626212](https://doi.org/10.1002/9783527626212)>.

Imports testthat, purrr, shiny, gamlss, dplyr, plotly, future, shinycssloaders, waiter, shinythemes, shinyWidgets, cachem, knitr

Depends R (>= 3.5.0)

License GPL-2

Encoding UTF-8

RoxygenNote 7.3.2.9000

VignetteBuilder knitr

Config/testthat/edition 3

NeedsCompilation no

Author Dominique-Laurent Couturier [aut, cre] (ORCID: <<https://orcid.org/0000-0001-5774-5036>>),
Nikita Mozgunov [aut] (ORCID: <<https://orcid.org/0000-0003-0941-718X>>),
Thomas Jaki [aut] (ORCID: <<https://orcid.org/0000-0002-1096-188X>>)

Maintainer Dominique-Laurent Couturier <dominique.couturier@mrc-bsu.cam.ac.uk>

Repository CRAN

Date/Publication 2025-02-27 12:30:02 UTC

Contents

CLT	2
shinyCLT	2
Index	3

CLT	<i>Launch the Central Limit Theorem Shiny application</i>
-----	---

Description

This function starts a Shiny application that demonstrates examples of the Central Limit Theorem. The app is stored internally within the package and showcases various statistical principles through interactive visualizations. Check more details at `vignette("shinyCLT")`

Usage

```
CLT(n.cores = NULL, mode = "app", user_plan = "cluster")
```

Arguments

n.cores	Number of cores to use for calculations. Default value is NULL, which means that half of the cores will be used with the ceiling rounding rule.
mode	Change application behaviour when web browser tab or IDE preview is closed. By default this will end the running function and stop the local shinyApp. Switching to "server" mode will keep the shiny application running in a background even if all with application is closed.
user_plan	Specifies the parallelization strategy to use. Acceptable values are "cluster" (default), "multicore", or "multisession".

Value

Runs shinyApp

Examples

```
if(interactive()){
  CLT() # Launch the CLT demonstration app
}
```

shinyCLT	<i>shinyCLT</i>
----------	-----------------

Description

shinyCLT

Index

CLT, [2](#)

shinyCLT, [2](#)