Package: BayesXsrc (via r-universe)

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Title Distribution of the 'BayesX' C++ Sources

Description 'BayesX' performs Bayesian inference in structured additive regression (STAR) models. The R package BayesXsrc provides the 'BayesX' command line tool for easy installation. A convenient R interface is provided in package R2BayesX.

Depends R (>= 2.8.0)

Suggests R2BayesX

SystemRequirements GNU make, C++14

License GPL-2 | GPL-3

URL https://www.uni-goettingen.de/de/bayesx/550513.html

NeedsCompilation yes

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Repository https://freezenik.r-universe.dev

RemoteUrl https://github.com/cran/BayesXsrc

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Contents

`run.bayesx` *Run BayesX*

Description

Run BayesX program files from R.

Usage

```
run.bayesx(prg = NULL, verbose = TRUE, ...)
```

Arguments

`prg`	a file path to a **BayesX** program file. If set to `NULL`, **BayesX** will start in batch mode.
`verbose`	should output be printed to the R console during runtime of **BayesX**.
`...`	further arguments to be passed to `system`.

Details

Function uses `system` to run **BayesX** within an R session.

Value

If a `prg` file is provided, the function returns a `list` containg information if **BayesX** was succesfully launched and how long the process was running.

Author(s)

Daniel Adler, Thomas Kneib, Stefan Lang, Nikolaus Umlauf, Achim Zeileis.

Examples

```
## Not run:
## create a temporary directory for this example
dir <- tempdir()
prg <- file.path(dir, "demo.prg")

## generate some data
set.seed(111)
n <- 200

## regressor
dat <- data.frame(x = runif(n, -3, 3))

## response
dat$y <- with(dat, 1.5 + sin(x) + rnorm(n, sd = 0.6))
```

```
## write data to dir
write.table(dat, file.path(dir, "data.raw"),
  quote = FALSE, row.names = FALSE)

## create the .prg file
writeLines("
bayesreg b
dataset d
d.infile using data.raw
b.outfile = mcmc
b.regress y = x(psplinerw2,nrknots=20,degree=3), family=gaussian predict using d
b.getsample", prg)

## run the .prg file from R
run.bayesx(prg)

## End(Not run)
```

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