Package 'pexm'

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Type Package

Title Loading a JAGS Module for the Piecewise Exponential Distribution

Version 1.1.2

Description Load the Just Another Gibbs Sampling (JAGS) module 'pexm'. The module provides the tools to work with the Piecewise Exponential (PE) distribution in a Bayesian model with the corresponding Markov Chain Monte Carlo algorithm (Gibbs Sampling) implemented via JAGS. Details about the module implementation can be found in Mayrink et al. (2021) <doi:10.18637/jss.v100.i08>.

Depends coda, rjags

Imports msm

Encoding UTF-8

License GPL-3

URL https://github.com/vdinizm/pexm

BugReports https://github.com/vdinizm/pexm/issues

NeedsCompilation yes

RoxygenNote 7.1.2

Suggests testthat

Author Vinicius Mayrink [aut, cre] (<https://orcid.org/0000-0002-5683-8326>),
Joao Duarte [aut],
Fabio Demarqui [ctb] (<https://orcid.org/0000-0001-9236-1986>)

Maintainer Vinicius Mayrink <vdinizm@gmail.com>

Repository CRAN

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R topics documented:

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loadpexm   *loadpexm*

Description

Function to load the Just Another Gibbs Sampling (JAGS) module pexm into the R environment.

Usage

```
loadpexm(f.path = NULL)
```

Arguments

f.path   This is an optional argument. If having difficulties to find the main file "pexm.so"
                   (unix) or "pexm.dll" (windows), the user may choose to manually include here
                   the corresponding quoted path to the target directory.

Details

The main purpose of the present function is to load the target JAGS module **pexm** into the R environment. The pexm module allows the application of the Piecewise Exponential (PE) distribution in any Bayesian model implemented through JAGS. In order to apply this loading routine, it is necessary to have JAGS installed in the computer. The supporting package **rjags** is also required and it should have been automatically installed together with **pexm**. Important remark for Windows users: the JAGS version 4.3.0 is the one considered in the present implementation of **pexm**. If working with another version, one must download the source code of **pexm** and then modify the file "Makevars.win" (directory src). In this case, simply adapt the path in JAGS_ROOT with the correct version number. In order to build the present package, the source code of **runjags** (*Denwood; 2016*) was used as an example. Details about **pexm** and the piecewise exponential model can be found in *Mayrink et al. (2021)*.

Value

Indication of whether the JAGS module **pexm** was correctly loaded in the R environment.

References

DOI:10.18637/jss.v071.i09 (Denwood; 2016)
DOI:10.18637/jss.v100.i08 (Mayrink et al.; 2021)

See Also

pexm

Examples

```
# Load the new module with the command below:
 loadpexm()
```

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pexm	*pexm: Loading a Just Another Gibbs Sampling Module for the Piecewise Exponential Distribution*

Description

Load the Just Another Gibbs Sampling (JAGS) module "pexm". The module provides the tools to work with the Piecewise Exponential (PE) distribution in a Bayesian model with the corresponding Markov Chain Monte Carlo algorithm (Gibbs Sampling) implemented via JAGS.

Details

The current version contains the main function loadpexm to load the proposed JAGS module. Details about JAGS can be found in the JAGS User Manual. Download instructions are presented in the home page given by this link. Details about **pexm** and the piecewise exponential model can be found in *Mayrink et al. (2021)*.

Author(s)

Vinicius D. Mayrink, Joao D. N. Duarte and Fabio N. Demarqui.

Departamento de Estatistica, ICEx, Universidade Federal de Minas Gerais, Av. Antonio Carlos, 6627, Belo Horizonte, MG, Brazil, 31270-901.

References

DOI:10.18637/jss.v100.i08 (Mayrink et al.; 2021)

See Also

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