Package 'sbfac'

March 20, 2011

Type Package

Title Semiparametric Bayesian Factor Analytic Copula Models

Version 0.1.9.7

Date 2011-03-17

Author Jared Murray

Maintainer Jared Murray <jsm38@duke.edu>

Description This package provides semiparametric estimation of a Gaussian copula model where the correlation matrix of the copula has a factor analytic decomposition.

License GPL-2

LazyLoad yes

Depends Rcpp (>= 0.8.6), RcppArmadillo, ggplot2

LinkingTo Rcpp, RcppArmadillo

SystemRequirements GNU make

Archs i386, x86_64

R topics documented:

`sbfac-package` *What the package does (short line) ~~ package title ~~*

Description

More about what it does (maybe more than one line) ~~ A concise (1-5 lines) description of the package ~~

Details

Package:	sbfac
Type:	Package
Version:	1.0
Date:	2011-03-17
License:	What license is it under?
LazyLoad:	yes

~~ An overview of how to use the package, including the most important functions ~~

Author(s)

Who wrote it

Maintainer: Who to complain to <yourfault@somewhere.net> ~~ The author and/or maintainer of the package ~~

References

~~ Literature or other references for background information ~~

See Also

~~ Optional links to other man pages, e.g. ~~ ~~ `<pkg>` ~~

`pdateLoadingsVarJC` *insert here the title*

Usage

```
pdateLoadingsVarJC(tauinv_, A_, taua_, taub_)
```

Arguments

`tauinv_`

`A_`

`taua_`

`taub_`

Examples

```
##---- Should be DIRECTLY executable !! ----
##-- ==>  Define data, use random,
##--or do  help(data=index)  for the standard data sets.

## The function is currently defined as
function (tauinv_, A_, taua_, taub_)
.Call("pdateLoadingsVarJC", tauinv_, A_, taua_, taub_, PACKAGE = "sbfac")
```

---

plotLoadingsHeat *insert here the title*

Usage

```
plotLoadingsHeat(Z_, A_, F_, tauinv_, rho_)
```

Arguments

```
Z_
A_
F_
tauinv_
rho_
```

Examples

```
##---- Should be DIRECTLY executable !! ----
##-- ==>  Define data, use random,
##--or do  help(data=index)  for the standard data sets.

## The function is currently defined as
function (Z_, A_, F_, tauinv_, rho_)
.Call("updateSparseLoadingsJ", Z_, A_, F_, tauinv_, rho_, PACKAGE = "sbfac")
```

---

updateLoadingsVarC *insert here the title*

Usage

```
updateLoadingsVarC(tauinv_, A_, taua_, taub_)
```

Arguments

```
tauinv_
A_
taua_
taub_
```

Examples

```
##---- Should be DIRECTLY executable !! ----
##-- ==>  Define data, use random,
##--or do  help(data=index)  for the standard data sets.

## The function is currently defined as
function (tauinv_, A_, taua_, taub_)
.Call("updateLoadingsVarC", tauinv_, A_, taua_, taub_, PACKAGE = "sbfac")
```

---

updateRho *insert here the title*

Usage

```
updateRho(rho_, A_, rhoa_, rhob_)
```

Arguments

rho_

A_

rhoa_

rhob_

Examples

```
##---- Should be DIRECTLY executable !! ----
##-- ==>  Define data, use random,
##--or do  help(data=index)  for the standard data sets.

## The function is currently defined as
function (rho_, A_, rhoa_, rhob_)
.Call("updateRho", rho_, A_, rhoa_, rhob_, PACKAGE = "sbfac")
```

---

updateScoresC *insert here the title*

Usage

```
updateScoresC(Z_, A_, F_)
```

Arguments

Z_

A_

F_

Examples

```
##---- Should be DIRECTLY executable !! ----
##-- ==>  Define data, use random,
##--or do  help(data=index)  for the standard data sets.

## The function is currently defined as
function (Z_, A_, F_)
.Call("updateScoresC", Z_, A_, F_, PACKAGE = "sbfac")
```

---

updateSparseLoadings

insert here the title

Usage

```
updateSparseLoadings(Z_, A_, F_, tauinv_, rho_)
```

Arguments

```
Z_
A_
F_
tauinv_
rho_
```

Examples

```
##---- Should be DIRECTLY executable !! ----
##-- ==>  Define data, use random,
##--or do  help(data=index)  for the standard data sets.

## The function is currently defined as
function (Z_, A_, F_, tauinv_, rho_)
.Call("updateSparseLoadings", Z_, A_, F_, tauinv_, rho_, PACKAGE = "sbfac")
```

---

updateSparseLoadingsJ

insert here the title

Usage

```
updateSparseLoadingsJ(Z_, A_, F_, tauinv_, rho_)
```

Arguments

```
Z_
A_
F_
tauinv_
rho_
```

Examples

```
##---- Should be DIRECTLY executable !! ----
##-- ==>  Define data, use random,
##--or do  help(data=index)  for the standard data sets.

## The function is currently defined as
function (Z_, A_, F_, tauinv_, rho_)
.Call("updateSparseLoadingsJ", Z_, A_, F_, tauinv_, rho_, PACKAGE = "sbfac")
```

Index