

# Information on package “EM.mixBGT”

Description: EM algorithm for bounded generalized  $t$  mixture model

Package: EM.mixBGT

Type: Package

Version: 0.1.0

Author: A.Mahdavi

Maintainer: Abbas Mahdavi (*a.mahdavi@vru.ac.ir*)

License: GPL ( $\geq 2.0$ )

Encoding: UTF-8

LazyData: true

Repository: GitHub

Needs Compilation: no

Built: R 4.0.4

UTC; windows

## Index:

EM.mixBGT

EM.mixBGT function

r.mixBGT

r.mixBGT function

## # Example:

# Simulating 1000 samples from two component BGTM distribution on  $(-1,1)$   
interval:

```
y <- r.mixBGT(n=1000,w=c(.5,.5), xi=c(-.9,.9), s=c(.5,1), b=c(5,.5),  
  , nu=c(5,5),l=-1,u=1)
```

# n: the number of random samples

# EM output with given initial values:

```
mixBGT(y,g=2,w=c(.5,.5), xi=c(-.9,.9), s=c(.5,1), b=c(5,.5) , nu=c(5,5),  
get.init=F,l=-1,u=1)
```

# EM output by getting initial values based on the K-mean algorithm :

```
mixBGT(y,g=2,get.init=T,l=-1,u=1)
```