Package 'CenBAR'

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Type Package

Imports MASS, mvtnorm, glmnet, splines, survival, cvTools

Depends foreach, parallel

Title Broken Adaptive Ridge AFT Model with Censored Data

Version 0.1.1

Description Broken adaptive ridge estimator for censored data is used to select variables and estimate their coefficients in the semi-parametric accelerated failure time model for right-censored survival data.

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RoxygenNote 7.0.2

NeedsCompilation no

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CenBAR *Broken Adaptive Ridge Estimator for Censored Data in AFT Model*

Description

Prints 'Broken adaptive ridge (BAR) method to the semi-parametric accelerated failure time (AFT) model for right-censored survival data by applying the Leurgan's synthetic data.'.

Usage

```
CenBAR(X,Y,delta,lambda.path=NULL, enableScreening=FALSE)
```

Arguments

X	input matrix, of dimension nobs x nvars; each row is an observation vector.
Y	response variable.
delta	The status indicator, normally 0=alive, 1=dead.
lambda.path	A user supplied lambda sequence. One usage is to have the program compute its own lambda sequence based on nlambda and lambdaMax. lamdMax = max((t(x)*Y)^2/(4*t(x)*x)). The other usage is use the sequence depend on user's data.
enableScreening	If nobs > nvars, there is no need to do screening; If nobs <= nvars, it will do variable screening and then variable selection and estimate (defalt is FALSE).

Value

beta	the coefficients estimation of the variables.

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Examples

```
X=matrix(rnorm(10*2),10,2)
Y=abs(rnorm(10))
delta=sample(0:1,10,replace=TRUE)
lambda.path <- seq(0.1, 10, l=5)
fit = CenBAR(X,Y,delta,lambda.path)
```

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