

Package ‘iForm’

April 22, 2018

Type Package

Title Forward Selection Under Marginality Principle

Version 1.0

Date 2016-03-29

Author Kirk Gosik

Maintainer Kirk Gosik <kgosik@broadinstitute.org>

Description Extended variable selection approaches to jointly model main and interaction effects from high-dimensional data.

License GPL-3

LazyData TRUE

RoxygenNote 5.0.1

NeedsCompilation no

R topics documented:

iForm 1

iForm	<i>Interaction Screening for Ultra-High Dimensional Data</i>
-------	--

Description

Extended variable selection approaches to jointly model main and interaction effects from high-dimensional data originally proposed by Hao and Zhang (2014) and extended by Gosik and Wu (2016). Based on a greedy forward approach, their model can identify all possible interaction effects through two algorithms, iFORT and iFORM, which have been proved to possess sure screening property in an ultrahigh-dimensional setting.

Usage

```
iForm(data, response)
```

Arguments

<code>data</code>	data.frame of your data with the response and all p predictors
<code>response</code>	character name of the response column in the dataset

Details

Runs the iFORM selection procedure on the dataset and returns a linear model of the final selected model.

Value

a summary of the linear model returned after the selection procedure

Author(s)

Kirk Gosik

See Also

`model.matrix`