

# Package ‘iForm’

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**Type** Package

**Title** Forward Selection Under Marginality Principle

**Version** 1.0

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**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

## R topics documented:

iForm . . . . . 1

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

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**See Also**

`model.matrix`