# Package 'VIMean'

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**Type** Package

**Title** Variability Independent of Mean

**Version** 0.1.0

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**Description** To computed the variability independent of mean (VIM) or variation independent of mean (VIM). The methodology can be found at Peter M Rothwell et al. (2010) <doi:10.1016/S1474-4422(10)70067-3>.

**License** GPL-3

**Encoding** UTF-8

**NeedsCompilation** no

**Repository** CRAN

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## Contents



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`VIM` *variability independent of mean (VIM)*

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### Description

Please feel free to contact us, if you have any advice and find any bug!

Version History:

Version 0.1.0: The first version.

### Usage

```
VIM(data,id,repeat.vars)
```

## Arguments

| | |
|---|---|
| `data` | a width type data frame |
| `id` | the name of variable indicating the subjects, e.g., "ID" |
| `repeat.vars` | the name of variables indicating the repeated measurement data, e.g., c("x1","x2","x3") |

## Value

| | |
|---|---|
| `vim` | the VIM of each subject |
| `coef` | the coefficients fitted from the regression of "sntd ~ k*avg^p" |
| `r.squared`, `adj.r.squared` | the r-squared and adjusted r-squared of the regression |

## Examples

```
set.seed(123)
df <- data.frame( "ID" = paste("ID", seq(1,100,1), sep = ""),
                  "x1" = sample(90:220, size = 100, replace = TRUE),
                  "x2" = sample(90:220, size = 100, replace = TRUE),
                  "x3" = sample(90:220, size = 100, replace = TRUE),
                  "x4" = sample(90:220, size = 100, replace = TRUE),
                  "x5" = sample(90:220, size = 100, replace = TRUE))
rst <- VIM(data=df,id="ID",repeat.vars=paste0("x",1:5))
```

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