

Package ‘burgle’

July 22, 2025

Type Package

Title 'Burgle': Stealing the Necessary Parts of Model Objects

Version 0.1.2

Maintainer Paul R. Gunsalus <gunsalp@ccf.org>

Description Provides a way to reduce model objects to necessary parts, making them easier to work with, store, share and simulate multiple values for new responses while allowing for parameter uncertainty.

License MIT + file LICENSE

Encoding UTF-8

RoxygenNote 7.2.3

Imports stats, MASS, survival, riskRegression

Suggests flexsurv, nnet

Depends R (>= 4.0.0)

NeedsCompilation no

Author Paul R. Gunsalus [aut, cre] (ORCID: <<https://orcid.org/0000-0001-6976-9094>>),
Jarrod E. Dalton [aut] (ORCID: <<https://orcid.org/0000-0001-8336-1212>>),
Adam T. Perzynski [aut] (ORCID: <<https://orcid.org/0000-0002-1323-0353>>)

Repository CRAN

Date/Publication 2024-10-01 08:40:07 UTC

Contents

| | |
|--------------------------|----------|
| burgle_ | 2 |
| predict_burgle | 3 |
| Index | 6 |

burgle_

Burgle

Description

Burgling what is necessary from different objects

Usage

```
burgle(object, ...)  
  
## S3 method for class 'lm'  
burgle(object, ...)  
  
## S3 method for class 'glm'  
burgle(object, ...)  
  
## S3 method for class 'CauseSpecificCox'  
burgle(object, ...)  
  
## S3 method for class 'cph'  
burgle(object, ...)  
  
## S3 method for class 'flexsurvreg'  
burgle(object, ...)  
  
## S3 method for class 'multinom'  
burgle(object, ...)  
  
## S3 method for class 'coxph'  
burgle(object, ...)
```

Arguments

| | |
|--------|----------------------------|
| object | the model object to burgle |
| ... | must be left empty for now |

Value

a burgle_ object

Examples

```
fit <- lm(Sepal.Length ~ Sepal.Width + Petal.Length, data = iris)  
bfit <- burgle(fit)  
object.size(fit)  
object.size(bfit)
```

| | |
|----------------|-----------------------------------|
| predict_burgle | <i>Predict for burgle methods</i> |
|----------------|-----------------------------------|

Description

Predict for burgle methods

Usage

```
## S3 method for class 'burgle_CauseSpecificCox'
predict(
  object,
  newdata = NULL,
  type = "lp",
  cause = 1,
  original = TRUE,
  draws = 1,
  sims = 1,
  times = NULL,
  ...
)

## S3 method for class 'burgle_cph'
predict(object, ...)

## S3 method for class 'burgle_flexsurvreg'
predict(
  object,
  newdata = NA,
  original = TRUE,
  draws = 1,
  sims = 1,
  type = "lp",
  times = NULL,
  ...
)

## S3 method for class 'burgle_multinom'
predict(
  object,
  newdata = NA,
  original = TRUE,
  draws = 1,
  sims = 1,
  type = "lp",
  floor = FALSE,
  seed = NULL,
```

```
    ...
  )

## S3 method for class 'burgle_coxph'
predict(
  object,
  newdata = NA,
  original = TRUE,
  draws = 1,
  sims = 1,
  type = "lp",
  times = NULL,
  ...
)

## S3 method for class 'burgle_lm'
predict(
  object,
  newdata,
  original = TRUE,
  draws = 1,
  sims = 1,
  type = "lp",
  se = FALSE,
  limits = NULL,
  ...
)

## S3 method for class 'burgle_glm'
predict(
  object,
  newdata,
  original = TRUE,
  draws = 1,
  sims = 1,
  type = "lp",
  se = FALSE,
  ...
)
```

Arguments

| | |
|----------|---|
| object | the results of burgle_* object |
| newdata | new data of class data.frame |
| type | either 'lp', 'response', 'link' for glm or 'risk' if time dependent |
| cause | which cause do you want to predict |
| original | whether or not to predict using the original model |

| | |
|---------------------|--|
| <code>draws</code> | how many different models to simulate |
| <code>sims</code> | how many simulated response to draw |
| <code>times</code> | if type = "risk" time for which to predict risk, if times and sims is multiple the return will be lists within lists |
| <code>...</code> | for future methods |
| <code>floor</code> | will set the minimum odds to 0, if negative odds exists |
| <code>seed</code> | a seed to specificity for simulating responses (multinomial only) |
| <code>se</code> | whether or not to include the standard error in the simulations |
| <code>limits</code> | limits (minimum and maximum) for simulated response values. |

Value

either a matrix or list of new model predictions

Index

burgle (burgle_), 2
burgle_, 2

predict.burgle_CauseSpecificCox
 (predict_burgle), 3
predict.burgle_coxph (predict_burgle), 3
predict.burgle_cph (predict_burgle), 3
predict.burgle_flexsurvreg
 (predict_burgle), 3
predict.burgle_glm (predict_burgle), 3
predict.burgle_lm (predict_burgle), 3
predict.burgle_multinom
 (predict_burgle), 3
predict_burgle, 3