Package 'CondiS'

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Type Package

Title Censored Data Imputation for Direct Modeling

Version 0.1.2

Description Impute the survival times for censored observations based on their conditional survival distributions derived from the Kaplan-Meier estimator. 'CondiS' can replace the censored observations with the best approximations from the statistical model, allowing for direct application of machine learning-based methods. When covariates are available, 'CondiS' is extended by incorporating the covariate information through machine learning-based regression modeling ('CondiS_X'), which can further improve the imputed survival time.

License GPL-2

Encoding UTF-8

Depends R (>= 3.6)

Imports caret, survival, kernlab, purrr, tidyverse, survminer

NeedsCompilation no

Suggests rmarkdown, knitr

VignetteBuilder knitr

RoxygenNote 7.1.2

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R topics documented:

CondiS *CondiS Function*

Description

This function allows you to impute survival time.

Usage

```
CondiS(time, status, tmax)
```

Arguments

time	The follow up time for right-censored data.
status	The censoring indicator, normally 0=right censored, 1=event at time.
tmax	A self-defined time-of-interest point; if left undefined, then it is defaulted as the maximum follow up time.

CondiS_X *CondiS-X Function*

Description

This function allows you to improve the imputed survival time by incorporating covariate information.

Usage

```
CondiS_X(pred_time, status, covariates, method)
```

Arguments

pred_time	The imputed follow up time for right-censored data.
status	The censoring indicator, normally 0=right censored, 1=event at time.
covariates	The additional patient data that is presumably associated with the survival time.
method	Choose from 8 machine learning algorithms; the default is "glm".

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