Package 'distcrete'

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Title Discrete Distribution Approximations

Version 1.0.3

Description Creates discretised versions of continuous distribution functions by mapping continuous values to an underlying discrete grid, based on a (uniform) frequency of discretisation, a valid discretisation point, and an integration range. For a review of discretisation methods, see Chakraborty (2015) <doi:10.1186/s40488-015-0028-6>.

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LazyData true

URL https://github.com/reconhub/distcrete

BugReports https://github.com/reconhub/distcrete/issues

Suggests knitr, rmarkdown, testthat

RoxygenNote 6.0.1

VignetteBuilder knitr

NeedsCompilation no

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Repository CRAN

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Contents

`distcrete` *Discretise a distribution*

Description

Discretise a distribution.

Usage

```
distcrete(name, interval, ..., w = 0.5, anchor = 0)
```

Arguments

`name`	The name of a distribution function (e.g., `norm`, `gamma`). The distribution must have a cdf function (e.g., `pnorm`) and a quantile function (e.g., `qnorm`) defined.
`interval`	The interval to discretise the interval onto.
`...`	Parameters to `cdf`. Can be matched positionally or by name.
`w`	How to weight the endpoints; must be between 0 and 1. If 0.5 then integration happens centred around the interval, if 0 floor, if 1 then ceiling.
`anchor`	Any location that is a valid `x`

Author(s)

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Examples

```
library(distcrete)
set.seed(415)
d0 <- distcrete("gamma", 1, shape = 3, w = 0)
d0$d(1:10)
d0$p(c(.1,.5))
d0$q(c(.1,.5))
d0$r(10)
```

Index