Package 'poissoned'

May 9, 2026

Type Package

Title Poisson Disk Sampling in 2D and 3D

Version 0.1.3

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Description Poisson disk sampling is a method of generating blue noise sample patterns where all samples are at least a specified distance apart. Poisson samples may be generated in two or three dimensions with this package. The algorithm used is an implementation of Bridson's ``Fast Poisson disk sampling in arbitrary dimensions" <doi:10.1145%2F1278780.1278807>.

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Encoding UTF-8

RoxygenNote 7.3.2

URL https://github.com/coolbutuseless/poissoned

BugReports https://github.com/coolbutuseless/poissoned/issues

Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

NeedsCompilation yes

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Repository CRAN

Date/Publication 2024-10-21 12:30:07 UTC

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poisson2d *Generate Poisson disk samples in 2D*

Description

Generate Poisson disk samples in 2D

Usage

```
poisson2d(w = 10, h = 10, r = 2, k = 30L, verbosity = 0L)
```

Arguments

w, h	width and height of region
r	minimum distance between points
k	number of sample points to generate at each iteration. default 30
verbosity	Verbosity level. default: 0

Value

data.frame with x and y coordinates. Points are returned in the order in which they were generated.

Examples

```
pts <- poisson2d(w = 40, h = 40, r = 1)
plot(pts, asp = 1, ann = FALSE, axes = FALSE, pch = 19)
```

poisson3d *Generate Poisson disk samples in 3D*

Description

Generate Poisson disk samples in 3D

Usage

```
poisson3d(w = 10, h = 10, d = 10, r = 4, k = 30L, verbosity = 0L)
```

Arguments

w, h, d	width and height and depth of region
r	minimum distance between points
k	number of sample points to generate at each iteration. default 30
verbosity	Verbosity level. default: 0

Value

data.frame with x, y and z coordinates. Points are returned in the order in which they were generated.

Examples

```
poisson3d(w = 10, h = 10, d = 10, r = 5)
```

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