

# Package: poisoned (via r-universe)

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**Type** Package

**Title** Poisson Disk Sampling in 2D and 3D

**Version** 0.1.3.9000

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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 (2007) "Fast Poisson disk sampling in arbitrary dimensions" <doi:10.1145/1278780.1278807>.

**License** MIT + file LICENSE

**Encoding** UTF-8

**RoxygenNote** 7.3.2

**URL** <https://github.com/coolbutuseless/poisoned>

**BugReports** <https://github.com/coolbutuseless/poisoned/issues>

**Suggests** testthat (>= 3.0.0)

**Config/testthat/edition** 3

**Repository** <https://coolbutuseless.r-universe.dev>

**RemoteUrl** <https://github.com/coolbutuseless/poisoned>

**RemoteRef** HEAD

**RemoteSha** 5922f563641adbfe5c9fdbfd73e451f2db3991fc

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poisson2d                      *Generate Poisson disk samples in 2D*

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### 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)
```

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poisson3d                      *Generate Poisson disk samples in 3D*

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### 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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