Package 'aRtsy'

April 15, 2021

Title Generative Art

Version 0.1.0

Date 2021-04-15

Description Implements generative art.

BugReports <https://github.com/koenderks/aRtsy/issues>

URL <https://github.com/koenderks/aRtsy>

Imports ggplot2, dplyr, tweenr, randomcoloR, reshape2, RcppArmadillo, Rcpp, knitr

LinkingTo Rcpp, RcppArmadillo

Language en-US

License GPL-3

Encoding UTF-8

LazyData true

RoxygenNote 7.1.1

VignetteBuilder knitr

R topics documented:

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paint_shape   *Paint shapes*

Description

This function paints shapes.

Usage

```
paint_shape(color = '#000000', background = '#fafafa', seed = 1)
```

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Arguments

color	the color of the shape.
background	the color of the background.
seed	the seed for the painting.

Value

A `ggplot` object with the painting.

Author(s)

Koen Derks, `<koen-derks@hotmail.com>`

References

https://github.com/cutterkom/generativeart

See Also

[paint_strokes](#) [paint_turmite](#)

Examples

```
bg <- sample(c('#fafafa', '#cc7722', '#a9d2c3', '#fc7c7c'), size = 1)

paint_shape(color = '#000000', background = bg)
```

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paint_strokes	*Paint strokes*

Description

This function paints strokes.

Usage

```
paint_strokes(palette = '#000000', neighbors = 1, p = 0.01, seed = 1,
                    iter = 1, width = 500, height = 500)
```

Arguments

palette	a vector of colors for the painting.
neighbors	the number of neighbors a block considers when taking over a color.
p	the probability of .
seed	the seed for the painting.
iter	the number of iterations.
width	the width of the painting.
height	the height of the painting.

Value

A ggplot object with the painting.

Author(s)

Koen Derks, <koen-derks@hotmail.com>

See Also

paint_turmite paint_shape

Examples

```
paint_strokes(palette = c('#fafafa', '#000000'), neighbors = 1, p = 0.01,
              seed = 1, iter = 1, width = 1500, height = 1500)
```

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paint_turmite *Paint turmites*

Description

This function paints turmites.

Usage

```
paint_turmite(color = '#fafafa', background = '#000000', p = 0.5, seed = 1,
                    iterations = 1e7, width = 1500, height = 1500)
```

Arguments

color	the color of the turmite.
background	the color of the background.
p	the probability of a state switch within the turmite.
seed	the seed for the painting.
iterations	the number of iterations of the turmite.
width	the width of the painting.
height	the height of the painting.

Value

A ggplot object with the painting.

Author(s)

Koen Derks, <koen-derks@hotmail.com>

References

https://en.wikipedia.org/wiki/Turmite

See Also

paint_strokes paint_shape

Examples

```
paint_turmite(color = "#fafafa", background = "#1E90FF", p = 0.5,
              seed = 1, iterations = 1e7, width = 1500, height = 1500)
```

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