

quollr: An R Package for Visualizing 2D Models in High Dimensional Space

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Abstract An abstract of less than 150 words.

1 Introduction

2 Implementation

Installation

The package can be installed from CRAN using

```
install.packages("quollr")
```

and from GitHub using

```
remotes::install_github("JayaniLakshika/quollr")
```

to install the development version.

Web site

More documentation of the package can be found at the web site (need to add the link).

Data sets

Functions

Compute hexagonal bin configurations

Generate full hex grid

Construct the 2D model with different options

Construct the high-D model with different options

Generate the triangular mesh

Compute parameter defaults

Shift the hexagonal grid origin

Benchmark value to remove the low-density hexagons

Benchmark value to remove the long edges

Model function

Predict 2D embeddings

Compute residuals

Visualizations

geom_trimesh

coloured_long_edges

remove long edges

show_langevitour

Tests

3 Examples

4 Conclusion

5 Acknowledgements

This article is created using [knitr](#) (Xie 2015) and [rmarkdown](#) (Xie, Allaire, and Golemund 2018) in R with the `rjtools::rjournal_article` template. The source code for reproducing this paper can be found at: <https://github.com/JayaniLakshika/paper-quollr>.

References

- Xie, Yihui. 2015. *Dynamic Documents with R and Knitr*. 2nd ed. Boca Raton, Florida: Chapman; Hall/CRC. <https://yihui.name/knitr/>.
- Xie, Yihui, J. J. Allaire, and Garrett Golemund. 2018. *R Markdown: The Definitive Guide*. Boca Raton, Florida: Chapman; Hall/CRC. <https://bookdown.org/yihui/rmarkdown>.

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