

The BrailleR Package

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This package has been created for the benefit of blind people wishing to get more out of R than it already offers — which is actually quite a lot!

This document exists as the normal help pages that are included in packages do not lend themselves to verbose detailing of the thought processes behind the functions in a package, especially when the target audience is not well understood.

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1 Why does the package exist?

BrailleR is a project to improve the accessibility of graphical information created by standard R commands into a textual form that can be easily interpreted by blind students who cannot access the graphs without printing the image to a tactile embosser.

Various functions are also being developed to make text output (that is visually appealing) more useful for a blind user who is reliant on synthesized speech or braille output to interpret the results.

2 Getting started

To use the functionality of the BrailleR package you need to have it and R installed. The package has no dependencies so can be installed from the zip file archive available from

`http://r-resources.massey.ac.nz/BrailleR/`

The package is also available from CRAN:
Once it is installed, you need to type:

```
library(BrailleR)
```

at the R prompt. Go on to the next section to see a few examples of the advantages the BrailleR package has to offer the blind user.

3 Method functions

4 Non-method functions

5 Functions created for efficiency or convenience

6 Acknowledgements

Contributions to the BrailleR Project are welcome from anyone who has an interest. I will acknowledge assistance in chronological order of the contributions I have received thus far.

Greg Snow was the first person to assist when he gave me copies of the original R code and help files for the R2txt functions that were part of his TeachingDemos package, available from

`http://`

7 References

The BrailleR Project was first announced at the DEIMS12 conference in Tokyo, Japan in February 2012. The original paper was:

Godfrey, A. Jonathan R. (2012) “The BrailleR Project.” pp–; downloadable via `http://r-resources.massey.ac.nz/`