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[[PackageName]]: Quasirandomness Improves Visualization of Dense Data [[work]]

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Abstract

Here should be the abstract.

Keywords: violin plot, distribution, kernel density, ggplot, R.

1. Introduction

The display of univariate data is a [[busy field]]. Display choices include using plots such as histograms, stem-and-leaf plots, boxplots, densities. For small- to moderately-sized datasets, [[scattered points plot. what is this called?]]. Wilkinson (1999) symmetric or stacked dot plots (histogram-like). Violin plots (Hintze and Nelson 1998). bean plots (Kampstra 2008).

Variable width square root of group size scaled width with many variability measures, e.g. standard error (McGill, Tukey, and Larsen 1978).

2. Comparisons of visualizations

beeswarm (multiple options), violin, boxplot, jitter on various data

3. Examples of usage

some nice examples of just our own stuff

4. Conclusions

5. Acknowledgements

References

Hintze JL, Nelson RD (1998). "Violin plots: a box plot-density trace synergism." *The American Statistician*, **52**(2), 181–184. doi:10.1080/00031305.1998.10480559.

Kampstra P (2008). "Beanplot: A boxplot alternative for visual comparison of distributions." *Journal of Statistical Software*, **28**(1), 1–9. URL http://www.jstatsoft.org/v28/c01.

McGill R, Tukey JW, Larsen WA (1978). "Variations of box plots." *The American Statistician*, **32**(1), 12–16. doi:10.2307/2683468.

Wilkinson L (1999). "Dot plots." *The American Statistician*, **53**(3), 276–281. doi:10.2307/2686111.

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