

iNZight: a data visualisation and exploration GUI for R

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Abstract

Getting started with data science is a daunting task, particularly when it requires a large amount of coding before you can even start looking at data. graphical user interfaces (GUIs) have often been used as a way of proving novice users the ability to interact with complex systems without the need for coding. However, many of these themselves have steep learning curves to understand how to make the software do what's needed, and do not provide a pathway to more standard and flexible methods, such as coding. iNZight is a GUI based tool written in R that provides students of statistics and data science the opportunity to interact with data and explore without first learning to code. The tool is designed to be easy to use, with logical interactions and clever defaults. However, it also provides some more complex features to manipulate and analyse data, and further provides a code history of the actions performed, creating a pathway between GUI and learning to code for those interested in progressing into the more open and exciting world of data science.

1 Introduction

There are other GUIs for R, namely ‘R Commander’ (Fox, 2005) and ‘Deducer’ (Fellows, 2012). Both of these software provide a range of features, centered mostly around a window-based interface to a collection of R (R Core Team, 2020) functions. Users decide the type of analysis or function they want to use, choose it, and then fill in the fields. ‘iNZight’ takes the opposite approach by providing an interface from which users choose *variables first*, and then processes are performed which differ based on the inputs.

Acronyms

GUI graphical user interface. 1, 2

References

- Fellows, I. (2012). Deducer: A data analysis GUI for R. *Journal of Statistical Software, Articles*, 49(8):1–15.
- Fox, J. (2005). The R Commander: A basic statistics graphical user interface to R. *Journal of Statistical Software*, 14(9):1–42.
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