

Thesis Template using R and knitr

Alexis Sardá-Espinosa

March 13, 2016

Dedication

To me

Abstract

Abstract goes here

Declaration

I declare that..

Acknowledgements

I want to thank...

Contents

1	Introduction	1
1.1	Introduction	1
2	Examples	2
2.1	Basics	2
2.2	Figures	2
2.3	Tables	3
A	First Appendix	4

List of Figures

2.1	Histograms for the iris dataset	2
2.2	Plots using <code>mtcars</code> dataset	3

List of Tables

2.1	First rows of the CO2 dataset	3
-----	---	---

Chapter 1

Introduction

1.1 Introduction

This is an example to write a thesis with **R** and the `knitr` package to generate the \LaTeX files.

Chapter 2

Examples

2.1 Basics

Using a random forest with the Chess dataset and OOB error estimate, best value of `mtry` was 13 with an accuracy of 0.995.

Try compiling the thesis with parallel support to see the difference in run time.

2.2 Figures

See Fig. 2.1 for an example of a single plot.

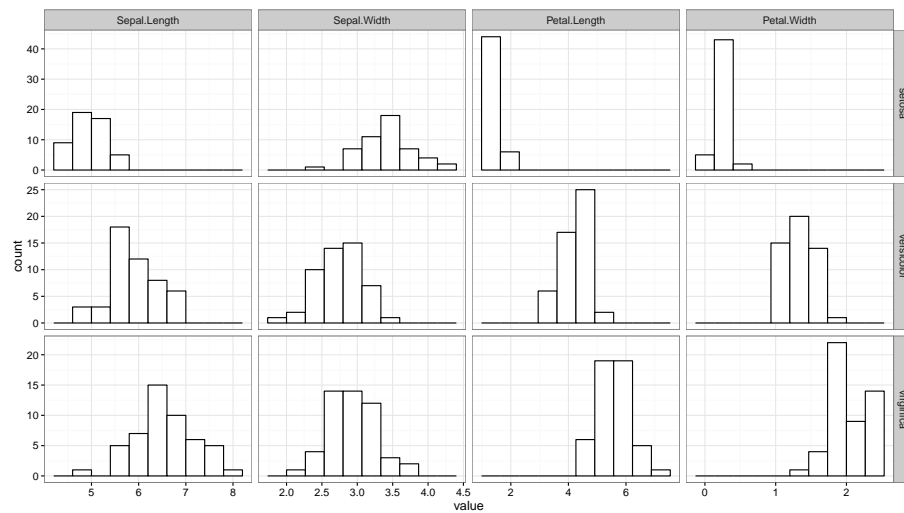


Fig. 2.1: Histograms for the iris dataset. Look at the list of figures to see difference between short and long captions.

See Fig. 2.2 for an example of two plots: Fig. 2.2a and Fig. 2.2b.

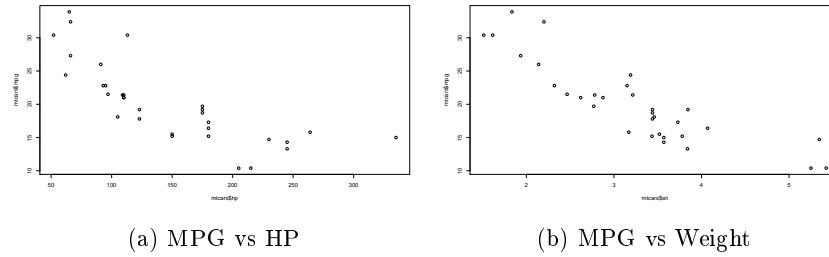


Fig. 2.2: Plots using `mtcars` dataset.

2.3 Tables

Table 2.1: First rows of the CO2 dataset. Look at the list of tables to see the difference between short and long table caption.

	Plant	Type	Treatment	conc	uptake
1	Qn1	Quebec	nonchilled	95.00	16.00
2	Qn1	Quebec	nonchilled	175.00	30.40
3	Qn1	Quebec	nonchilled	250.00	34.80
4	Qn1	Quebec	nonchilled	350.00	37.20
5	Qn1	Quebec	nonchilled	500.00	35.30
6	Qn1	Quebec	nonchilled	675.00	39.20

Bibliography

- [Lichman(2013)] M. Lichman. UCI machine learning repository, 2013. URL <http://archive.ics.uci.edu/ml>.
- [R Core Team(2015)] R Core Team. *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing, Vienna, Austria, 2015. URL <https://www.R-project.org/>.
- [RStudio Team(2015)] RStudio Team. *RStudio: Integrated Development Environment for R*. RStudio, Inc., Boston, MA, 2015. URL <http://www.rstudio.com/>.

Appendix A

First Appendix