The Rattle Package: Quick Start Guide

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1 Introduction

Rattle (Williams, 2011) is a package written in R providing a graphical user interface to very many other R packages that provide functionality for data mining.

This quick start guide is under development. See http://rattle.togaware.com for extensive documentation

2 Requirements

Rattle depends on over 40 other R packages and a couple of other software applications/libraries that are independent of R. The first thing to ensure is that you have installed the GTK+ libraries and the GGobi application. This is operating system dependent and full installation instructions are available from http://rattle.togaware.com/.

Only a couple of R packages are dependencies for Rattle. Most are suggestions, but without them functionality is quite limited. At a minimum it is useful to ensure you have the RGtk2 package installed. Others that you might like to install include: ada, arules, doBy, ellipse, fBasics, fpc, gplots, Hmisc, kernlab, mice, party, playwith, pmml, randomForest, reshape, rggobi, RGtk2, ROCR, RODBC, and rpart.

The packages will usually be installed with the following command:

> install.packages(rattle, dependencies=c("Depends", "Suggests"))

The latest beta version of rattle is available from http://rattle.togaware.com/:

> install.packages("rattle", repos="http://rattle.togaware.com", type="source")

3 First Steps

Start up rattle:

- > library(rattle)
- > rattle()

4 Sipmle Scenario: Build a Couple of Models

- 1. Click Execute
- 2. Click Yes (load the sample weather dataset)
- 3. Click the Model tab
- 4. Click Execute (to build a decision tree)
- 5. Click Draw to display the decision tree (loads other packages as required)
- 6. Click the Forest radio button
- 7. Click Execute (to build a random forest loads packages as required)
- 8. Click the Evaluate tab
- 9. Click the Risk radio button (installs packages as required)
- 10. Click Execute to display two Risk (Cummulative) performance plots
- 11. Click the Log tab
- 12. Click the Export button to save script to file weather_script.R to home folder

Now exit from R (and rattle) and start R up again.

> source("~/weather_script.R")

This will rerun everything that was done in the GUI session but purely as a script.

5 References

Williams, G. J. (2009). *Rattle: A Data Mining GUI for R.* The R Journal, 1(2), 45-55. URL: http://journal.r-project.org/archive/2009-2/RJournal_2009-2_Williams.pdf.

Williams, G. J. (2011). Data Mining with Rattle and R: The Art of Excavating Data for Knowledge Discovery. Use R! series. Springer. http://www.amazon.com/gp/product/1441998896.