

R-Adamant: Financial technical analysis made easy

Fausto Molinari*, Martina Salvadori**

*Contact: fausto.molinari@ymail.com, **Contact: martinasalvadori@libero.it

Keywords: Finance, Econometrics, GUI, HPC, Database

Most college students and resource groups know very well, how frustrating and time consuming is loading the code and the scripts manually and check the package dependencies of R.

After spending several years, looking for a more user friendly and scalable softwares we decided to develop our own package for R, customized for financial technical analysis, containing almost 620 formulas, organized as simple formulas, indexes, models, tests and oscillators.

Of course keeping with the r-project tradition, our package will be released under the open source GNU license.

Full compatibility is guaranteed for all the Os, supported by R and any part of the code may be easily debugged in order to fix any programming error.

The release for the UseR conference will contain almost 620 formulas and the first stable release publicly available will contain 1200 formulas.

The estimated target for the first class, business solution will be of 2304 formulas, in addition to frequent updates and high level technical and statistical support.

A customizable GUI will improve the productivity and ease of use for beginners and also advanced users, who can benefit of the all in one package, independent of any other 3rd party software.

Our team and the open source community will provide support to develop customized packages to Universities, research groups and individuals to address any specific need. All the released formulas will be fully documented in a specific manual.

It will also have a host of extensions and advanced features such as, parallel computing operations and interaction with grid and HPC applications.

Moreover, the data could be retrieved locally or remotely from csv or txt files and any other database source of the most popular databases (PostgreSQL, MySQL, SQLite, MS SQL, Oracle, Sybase, etc...) and displayed in chart or as image file.

References

Johnston J. (1984), *Econometric Methods* - third edition, McGraw-Hill

Harvey A.C. (1993), *Time Series Models* 2nd Edition, The MIT Press.

Crawley M.J. (2007), *The R Book*, Wiley.

R Development Core Team (2009), *R: A language and environment for statistical computing*, R Foundation for Statistical Computing, Vienna, Austria
<http://www.R-project.org>

Eddelbuettel D. (2010), *CRAN Task View: High-Performance and Parallel Computing with R*
<http://cran.r-project.org/web/views/HighPerformanceComputing.html>