**Announcement**

SciCom version 0.3.0 has been released. SciCom (Scientific Computing) for Ruby brings the power of R to the Ruby community. SciCom is based on Renjin, a JVM-based interpreter for the R language for statistical computing.

**R on the JVM**

Over the past two decades, the R language for statistical computing has emerged as the de facto standard for analysts, statisticians, and scientists. Today, a wide range of enterprises – from pharmaceuticals to insurance – depend on R for key business uses. Renjin is a new implementation of the R language and environment for the Java Virtual Machine (JVM), whose goal is to enable transparent analysis of big data sets and seamless integration with other enterprise systems such as databases and application servers.

Renjin is still under development, but it is already being used in production for a number of client projects, and supports most CRAN packages, including some with C/Fortran dependencies.

**SciCom and Renjin**

SciCom integrates with Renjin and allows the use of R inside a Ruby script. In a sense, SciCom is similar to other solutions such as RinRuby, Rpy2, PipeR, etc. However, since SciCom and Renjin both target the JVM there is no need to integrate both solutions and there is no need to send data between Ruby and R, as it all resides in the same JVM. Further, installation of SciCom does not require the installation of GNU R; Renjin is the interpreter and comes with SciCom. Finally, although SciCom provides a basic interface to Renjin similar to RinRuby, a much tighter integration is also possible (see examples below).

**Whats New**

Version 3.0.0 adds two new methods to SciCom, install\_\_package and library. Method install\_package will install a new package from Renjin package repository and method library loads the package. This is still a simple implementation, so, every time install\_\_package is called it will download the package again, even if the package was already installed. There is no way of controlling the package version; it will always download the latest available version in the repository.

**SciCom main properties are**

* Allows access to R scripts from inside Ruby scripts;
* Allows for R scripts written in R by accessing method ‘R.eval’;
* Allows R scripts to be embedded inside here docs in Ruby;
* Creates a new ‘language’ that allows regular Ruby scripts to call R methods in such a way that programmers can be unaware of the fact that they are using R (although, of course, knowing R is of great benefit).;
* Integrates with MDArray allowing multi-dimensional arrays to be slice and cut and passed to an R script.

**SciCom installation and download**

* Install Jruby
* jruby –S gem install scicom

**SciCom Homepages**

* <http://rubygems.org/gems/scicom>
* <https://github.com/rbotafogo/scicom/wiki>

**Contributors**

Contributors are welcome.

**SciCom History:**

* 19/Mar/2015: Version 0.3.0 – Added methods package\_\_install and library
* 02/Jan/2015: Version 0.2.3.1
* 30/Dez/2014: Version 0.2.3
* 19/Nov/2014: Version 0.2.2 - Another small bug fix
* 16/Nov/2014: Version 0.2.1 – Small bug fix
* 16/Nov/2014: Version 0.2.0 – Initial release