## RGG: An XML-based GUI Generator for R Scripts

Visne Ilhami<sup>1</sup>\*, Vierlinger Klemens<sup>1</sup>, Leisch Friedrich<sup>2</sup>, Kriegner Albert<sup>1</sup>

R is the leading open source statistics software with many analysis packages developed by the user community. However, the use of R requires programming skills. We have developed a software tool, called R GUI Generator (RGG), which enables generation of Graphical User Interfaces (GUI) for R scripts by adding a few simple XML-tags. An RGG file (.rgg), which contains R code and GUI elements, serves as a template for the GUI engine. The GUI engine loads the RGG file and at runtime creates and arranges GUI elements from the XML tags. User-GUI interactions are converted into the corresponding R code, which replace the XML tags. As a result a new R script is generated from the template. The project's aim is to provide R developers with a tool to make R based statistical computing available to a wider audience less familiar with script based programming. The project further includes the development of a repository and documentation system for R-GUIs being developed by community. The project's website is at http://rgg.r-forge.r-project.org.

<sup>&</sup>lt;sup>1</sup> Austrian Research Centers GmbH - ARC, Molecular Diagnostics, A-2444 Seibersdorf, Austria

<sup>&</sup>lt;sup>2</sup> Institut für Statistik, Ludwig-Maximilians-Universität, Ludwigstraße 33, D-80539 München, Germany

<sup>\*</sup> ilhami.visne@arcs.ac.at