Interactive Visualizations from R

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In this talk, I will discuss rCharts [1], an R package to create, customize and share interactive visualizations straight from R, using a consistent plotting interface, leveraging several existing javascript visualization libraries.

The advent of javascript visualization frameworks like d3.js [1] and raphaeljs have made it easier to create sophisticated interactive visualizations. However, it requires deep knowledge of web development tools, making it harder to use for data scientists, who often spend a lot of their time analyzing data using languages like R/Python/Julia. Moreover, data scientists are often used to creating plots with a few lines of code, as opposed to building a plot up from scratch, as is often the case with interactive plotting libraries.

The main motivation behind this work is to provide data scientists a seamless workflow that allows them to execute all steps of the data visualization process, from acquiring data to exploring it, visualizing it, and sharing the results as an interactive presentation, without having to leave the comfort of their primary language for data analysis.

References

- [1] Vaidyanathan, R. (2014) rCharts: Interactive Visualizations from R. http://rcharts.github.io
- [2] Bostock, M., Ogievetsky, V., & Heer, J. (2011). D3: data-driven documents. Visualization and Computer Graphics, IEEE Transactions on, 17(12), 2301-2309.