Revolutions

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R moves up to 5th place in IEEE language rankings

IEEE Spectrum has just published its third annual ranking with its 2016 Top Programming Languages, and the R Language is once again near the top of the list, moving up one place to fifth position.

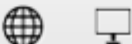| Language Rank	Types	Spectrum Ranking
1. C	📱 🖥 ▦	100.0
2. Java	🌐 📱 🖥	98.1
3. Python	🌐 🖥	98.0
4. C++	📱 🖥 ▦	95.9
5. R	🖥	87.9
6. C#	🌐 📱 🖥	86.7
7. PHP	🌐	82.8
8. JavaScript	🌐 📱	82.2
9. Ruby	🌐 🖥	74.5
10. Go	🌐 🖥	71.9

As I said last year (when R moved up to take sixth place), this is an extraordinary result for a domain-specific language. The other four languages in the top 5 (C, Java, Python amd C++) are all general-purpose languages, suitable for just about any programming task. R by contrast is a language specifically for data science, and its high ranking here reflects both the critical importance of data science as a discipline today, and of R as the language of choice for data scientists.

IEEE Spectrum ranks languages according to a large number of factors, including search rankings and trends, social media mentions, and job posting. (You can adjust the weighting of these factors to generate your own rankings using this interactive tool.) It also includes scholarly citations of the languages, a factur that influenced R's rise in this ranking:

> Another language that has continued to move up the rankings since 2014 is R, now in fifth place. R has been lifted in our rankings by racking up more questions on Stack Overflow—about 46 percent more since 2014. But even more important to R's rise is that it is increasingly mentioned in scholarly research papers. The *Spectrum*d efault ranking is heavily weighted toward data from IEEE Xplore, which indexes millions of scholarly articles, standards, and books in the IEEE database. In our 2015 ranking there were a mere 39 papers talking about the language, whereas this year we logged 244 papers.

In related news, R also increased its ranking in the recently-released RedMonk Language Rankings for June 2016, moving up one spot to take 12th place. Unlike IEEE Spectrum, RedMonk ranks language using just two criteria: activity of the language on GitHub and StackOverflow. Analyst Stephen O'Grady had this to say about R's performance in the RedMonk rankings:

> Out of all the back half of the Top 20 languages, R has shown the most consistent upwards movement over time. From its position of 17 back in 2012, it has made steady gains over time, but had seemed to stall at 13 having stuck there for three consecutive quarters. This time around, however, R took over #12 from Perl which in turn dropped to #13. There's still an enormous amount of Perl in circulation, but the fact that the more specialized R has unseated the language once considered the glue of the web says as much about Perl as it does about R.

Again, R's steady growth in this and <u>numerous other surveys and rankings</u> over time reflects the growing importance of data science applied using R.

Posted by <u>David Smith</u> at 11:38 in <u>popularity</u>, <u>python</u>, <u>R</u> | <u>Permalink</u>

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Only 10% points behind Python??? Wonder why? Still not a great IDE for python like RStudio (or too many choices although I'm liking atom more and more).

Posted by: Brian | <u>July 30, 2016 at 21:04</u>

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