C++ for R Programmers

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Invited Session: What other languages should R users know about ?

useR! 2012 Vanderbilt University June 14, 2012



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- In science and research, it is one of the most widely-used languages. If there is something you want to use or connect to, it probably has a C/C++ API.
- As a widely used language it also has good tool support (debuggers, [memory] profilers, code analysis).

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And C++11 adds many more goodies that could be called a fifth language.



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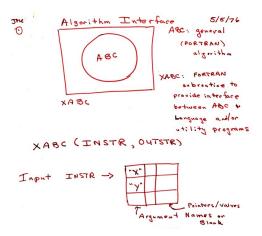
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- It so happens that I think R and C++ mix well via Rcpp and RInside.

John Chambers agrees – and shares a "vision" from 1976



Source: John Chambers' talk at Google, 2010.



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- "Empirically speaking", 68 CRAN packages (as of 3 June 2012) using Rcpp seem to agree.
- This makes Rcpp the most widely used foreign-language interface package for R (as it overtook rJava recently).

Python

Python



Python



Trust me, Mogli.... Seriously?



Julia

Julia



My Julia – and until I find a matching language named after my other daughter Anna ...

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- Ohris will cover both in the Python part.

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 - Chander Carruth on Clang Defending C++ from Murphy's Million Monkeys