The Development of R in China, and One Sentence Summaries of My R Projects

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Warning

- $\LaTeX$ beamer slides $=$ sleepy audience

About me

- Yichang, Hubei, China (The Three-Gorges Dam)
- bachelor + master, School of Statistics, Renmin University of China, Beijing
- 4th year PhD student, Department of Statistics, Iowa State University
- intern, Fred Hutchinson Cancer Research Center
- founder of
  - Capital of Statistics (http://cos.name)
  - the China-R Conference (http://cos.name/chinar/)
- author of nine, maintainer of two

R and me

- 2002, barely knew how to turn on a computer
- 2004, Visual Basic, my first programming language
- 2004, S-Plus, Nonparametric Statistics
- 2005, R, Statistical Computing
- taught by Dr Xing Wang, student of Prof Xizhi Wu (PhD of UNC Chapel Hill, went back to China, huge influence on the field of statistics in China)
- Wu was the first one who introduced R at Renmin University

R and us

- early days: translation of documentation, extensive use of '?'
- 2006: Capital of Statistics
  - R forum (the most popular R community in China now)
- 2008: the first Chinese R Conference, Beijing
  - useR! 2008
- 2012: monthly meetups (not restricted to R)
- 2013: translating books (e.g. ggplot2, The Art of Programming with R, ...)

R and us (cont'd)

- 2013: the 6th China-R Conference (May 18-19)
  - 400 participants
  - 19 talks, 2 lightning talk sessions
  - Merck, Amazon, Springer, eBay, Alipay, ... (Revolution next year?)
  - Shanghai conference in November/December
- what's next?
  - move the conference to other areas, e.g., Shenzhen, Xiamen, Taiwan
  - International speakers (John Maindonald and Graham Williams were our guinea pigs this year)
  - write books on our own
  - we definitely need more sponsors

My R packages

- animation
- formatR
- Rd2roxygen
- R2SWF
- iBUGS
- fun
- MSG
- knitr
- cranvas

animation

- draw plots one by one, pause for a second
- `for (i in 1:n) {plot(); Sys.sleep(1)}`

formatR

- beautify ugly R code for the sake of poor TA's and professors
- `deparse(parse(text = code))`

Rd2roxygen

- LaTeX is boring; Rd is not LaTeX; Rd is more boring
- turn Rd back to roxygen, then code and doc live together happily ever after
- `paste("#' @tag", tools::parseRd())`
- Hadley's original idea

R2SWF

- turn images to Flash (.swf) from R
- libming
- co-author Yixuan Qiu

iBUGS

- you just cannot remember how many arguments there are in R2WinBUGS!
- `gWidgets::gwindow(...)`
- a by-product of Stat 544 (Bayesian Statistics)

fun

- the package name says everything
- `grDevices::getGraphicsEvent()`
- co-author Yixuan Qiu and Taiyun Wei

MSG

- not Monosodium Glutamate, but Modern Statistical Graphics
- my book (never finished)

knitr

- code + narrative = report
- `grep()` + `eval()`
- knitr, neater? knit + R (S + weave)

cranvas

- fast and interactive graphics in R
- Qt
- `qtpaint::qdrawSomething()`

Other projects

- NBA game
- Voyages of Sinbad the Sailor
- Shiny teaching modules

Random thoughts

- FAQ's are nearly bugs
- encourage collaboration (users are smart)
- a blog helps (people tend to overestimate bloggers, but that is not necessarily bad)
- let fun be the motivation, and science be the destination
  - animation and statistics, knitr and reproducible research

Thanks!

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