

Data Scientist vs Actuary

A Perspective using Shiny and HTMLWidgets



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Agenda

Over-Elaborate Agenda Slide

Who are Mango?

Background: The LIFE Conference

The Data Science Radar

Shiny & HTMLWidgets

Rapturous Applause

Who are Mango?

Data Science Services

Analytic Infrastructure

R Training & Consulting

We ♥ R



PartnerRe



Institute
and Faculty
of Actuaries

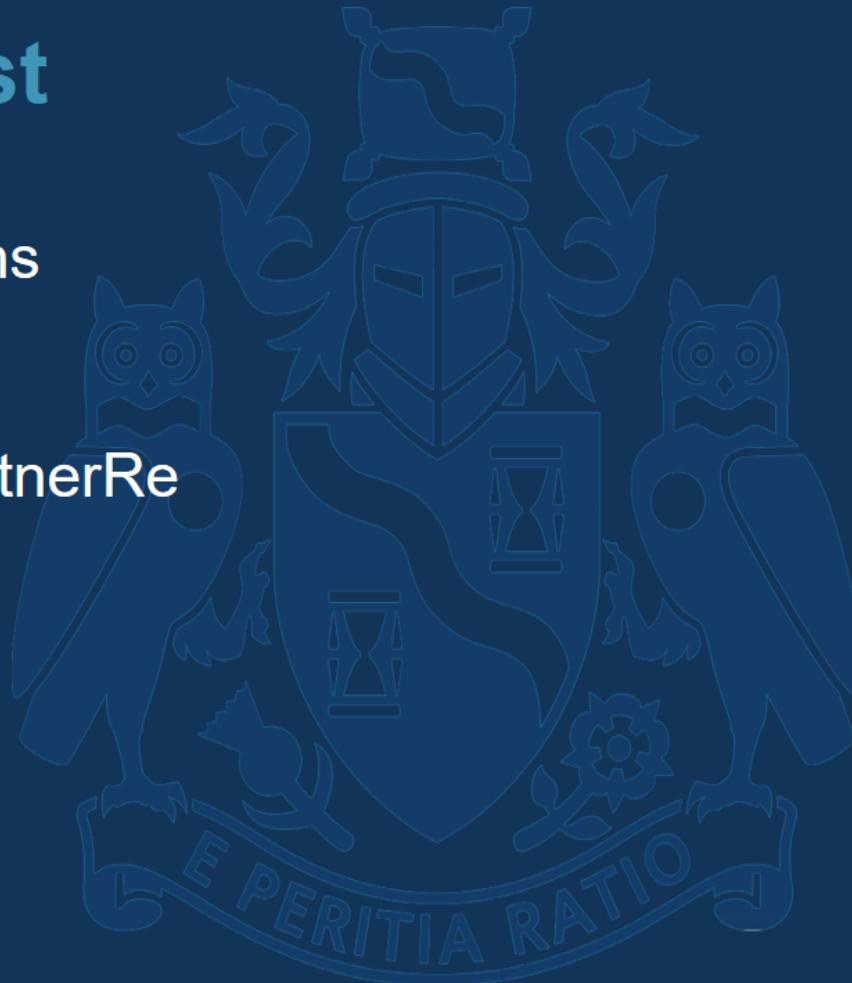


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of Actuaries

Actuary vs Data Scientist

Richard Pugh
Chief Data Scientist, Mango Solutions

Chris Reynolds
Head of Life Solutions Actuarial, PartnerRe





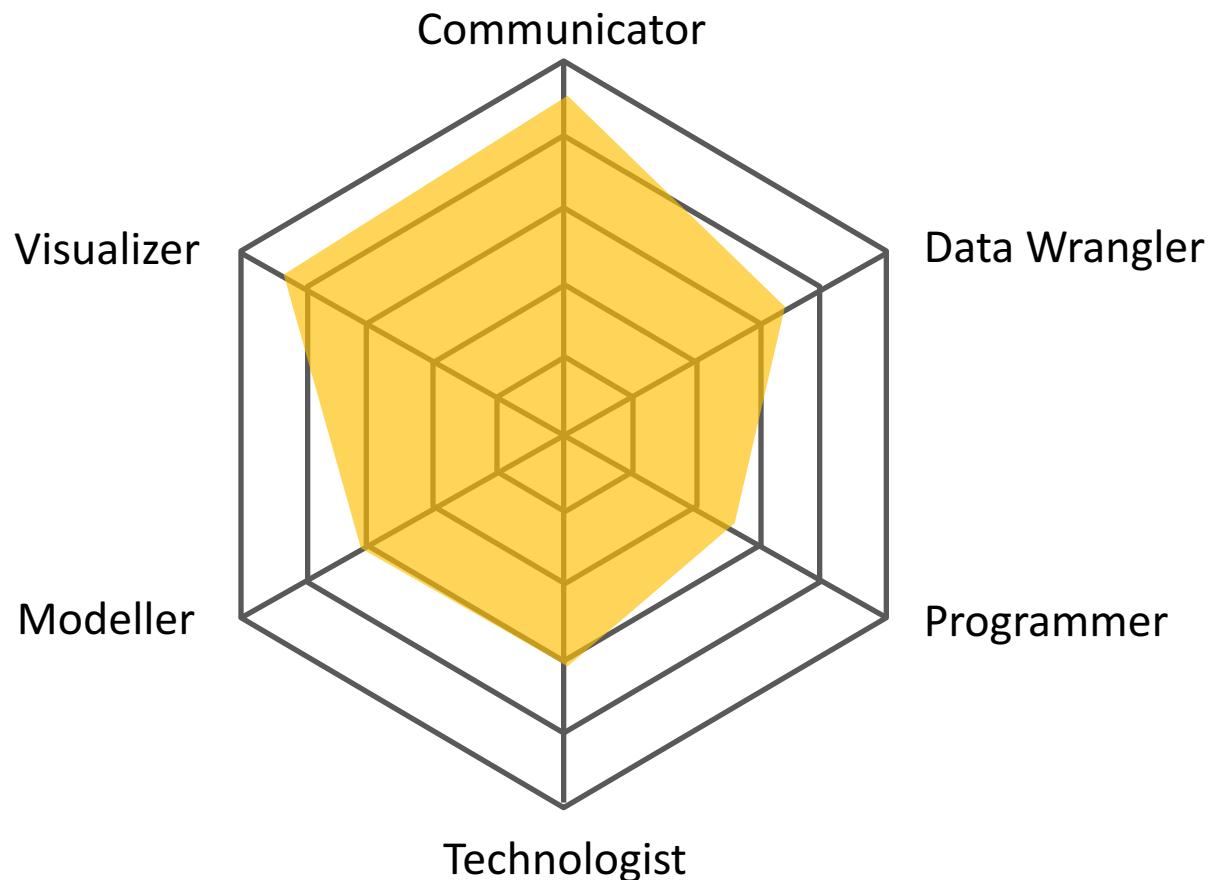
Actuary ~ **63%**

Data Scientist ~ **37%**



Talking about
Unicorns ...

Data Science Radar







The HTMLWidgets Package

- Allows us to use JavaScript visualization libraries from R
- Embed widgets in R Markdown and Shiny
- Choose existing, or develop new widgets
- Created by Ramnath Vaidyanatha, Yihui Xie, JJ Allaire, Joe Cheng & Kenton Russell

htmlwidgets for R x

www.htmlwidgets.org

htmlwidgets for R Home Showcase Develop ▼ Gallery GitHub

Bring the best of JavaScript data visualization to R

Use JavaScript visualization libraries at the R console, just like plots

Embed widgets in R Markdown documents and Shiny web applications

Develop new widgets using a framework that seamlessly bridges R and JavaScript

At the R console In R Markdown docs In Shiny apps

The screenshot shows a browser window displaying the htmlwidgets.org website. The main content area features a heading 'Bring the best of JavaScript data visualization to R' and three bullet points: 'Use JavaScript visualization libraries at the R console, just like plots', 'Embed widgets in R Markdown documents and Shiny web applications', and 'Develop new widgets using a framework that seamlessly bridges R and JavaScript'. Below this is a section titled 'Oregon Climate Station Data' with a map of Oregon showing weather station locations. A code snippet for generating the map is shown above the map. At the bottom of the map section are three buttons: 'At the R console', 'In R Markdown docs', and 'In Shiny apps'. The browser's address bar shows 'www.htmlwidgets.org'.

Widgets in action

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<https://github.com/MangoTheCat/radarchart>

MangoTheCat / **radarchart**

Code Issues 12 Pull requests 0 Pulse Graphs

Implementation of the radar chart from chart.js library

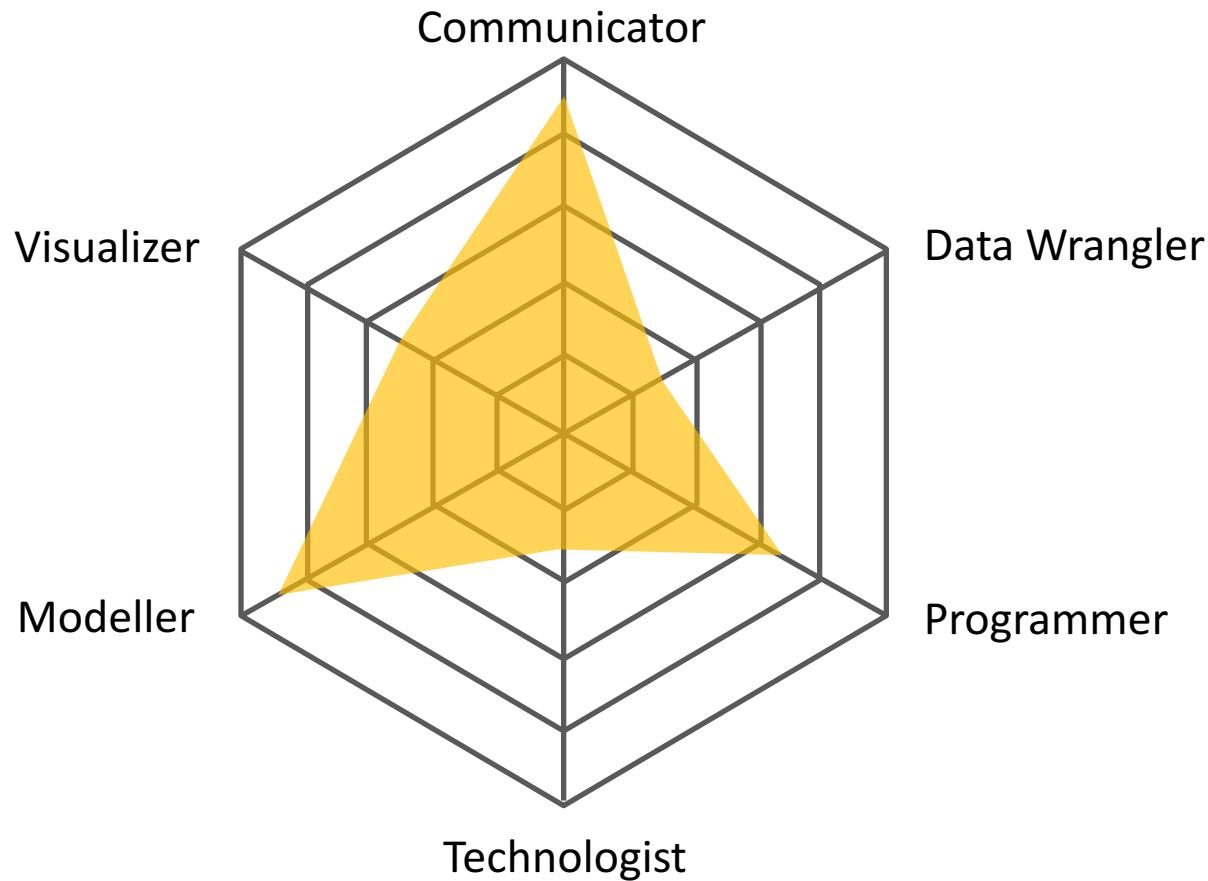
123 commits 3 branches 3 releases 2 contributors

Branch: master ▾ New pull request Find file Clone or download ▾

dougmet Merge pull request #21 from MangoTheCat/develop ... Latest commit 51741b7 on 2 Jun

R	Fixes #15. Forces colour matrix to be integer	2 months ago
data	Adding demo datasets	5 months ago
inst	submit out. reactiveValues in	2 months ago
man	Fixes #15. Forces colour matrix to be integer	2 months ago
tests	add a test for runExampleApp #7	2 months ago
vignettes	Vignette header	5 months ago
.Rbuildignore	0.1.2 release	4 months ago
.bowerrc	Working radar	10 months ago
.gitignore	remove project file	5 months ago
.travis.yml	travis config	5 months ago

An Actuary?





THANK YOU
FOR
YOUR
ATTENTION!



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Building a Widget from Bower.io

- Find the widget you want
- Create an R package
- Run scaffoldWidget
- Edit the R function and tweak the JavaScript!