



@BRUG 29. March 2017
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RUBY ON MALES

4/8/15 7 AM

<http://fusion.net/story/115998/survey-says-92-percent-of-software-developers-are-men/>

Survey says: 92 percent of software developers are men



92.1 percent of the respondents to Stack Overflow's [2015 developer survey](#) identified as male; only 5.8 percent identified as female. (The remaining respondents either chose "other" or declined to answer.) The survey was conducted online in February, using ads placed on Stack Overflow, and included respondents from 157 countries.

V. GENDER



25,744 responses

Revolutions

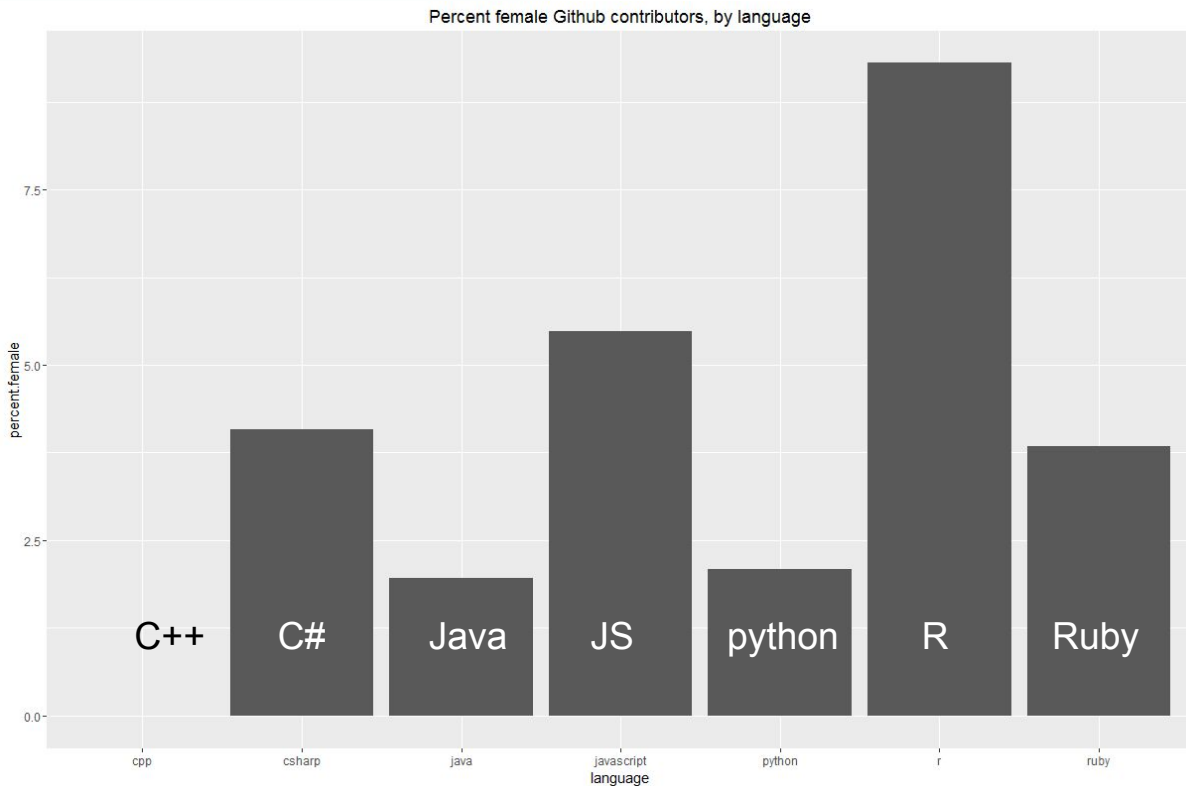
Daily news about using open source R for big data analysis, predictive modeling, data science, and visualization since 2008

<http://blog.revolutionanalytics.com/2016/06/programmers-gender.html>

[« Using Microsoft R Server on a single machine for experimenting with Packages of UseR! »](#)

June 15, 2016

Gender ratios of programmers



The Stack Overflow survey also turned up some hopeful statistics about tech and gender. **67 percent of female respondents, for example, had less than five years of coding** experience, and **37 percent had less than two** years. That might mean that young women are joining the coding class and making it less homogenous. Also, women made up a much greater percentage of respondents from India than in the U.S., meaning that at least some countries are having luck closing the gap.

How about our community??

Can we estimate how many women are expected to show up to our events?

Can we get the data?

Data analysis SUPER POWERS: APIs!!!

What is an API?

“It is APIs that allow machines to access data programmatically – that is automatically from within a program – to make use of API provided functionalities and data. Without APIs much of today’s Web 2.0, Apps and data applications would be outright impossible.”

Why is it important for us?

THEY HAVE SAME OR SIMILAR STRUCTURE

so learning it once will give you GREAT POWER of accessing them all!

Can we use it?

How to get this done?

<http://tophcito.blogspot.de/2015/11/accessing-apis-from-r-and-little-r.html>

Thursday, November 26, 2015

Accessing APIs from R (and a little R programming)

Working with APIs

Christoph Waldhauser
22/11/2015

APIs are the driving force behind data mash-ups. It is APIs that allow machines to access data programmatically – that is automatically from within a program – to make use of API provided functionalities and data. Without APIs much of today's Web 2.0, Apps and data applications would be outright impossible.

This post is about using APIs with R. As an example, we'll use the EU's [EurLex¹ data base API](#) as provided by [Buhl Rassmussen](#). This API is a good example of the APIs you might find in the wild. Of course, there are the APIs of large vendors, like Google or Facebook, that are thought out and well documented. But then there is the vast majority of smaller APIs for special applications that often lack in structure or documentation. Nevertheless, these APIs often provide access to valuable resources.

Background on APIs

API is short for Application Programming Interface. Basically, it means a way of accessing the

R Blogs



R-bloggers

Building views with R

18 hours ago

Other things KDSS

[Company website](#)

[LinkedIn Company Profile](#)

Blog Archive

All web-based ² APIs have always the same structure: they consist **of a URL to a domain and a path to an endpoint**. For instance: **http://example.com/api** where http://example.com is the URL and /api is the path to the endpoint.

Web-based APIs that are used for data science come usually in two flavors that are named after the HTTP verbs defined ³:

- GET – sends a set of parameters, a query to an endpoint and then receives an answer.
- POST – sends a data payload to an endpoint to be processed at the remote system, usually receiving only a success message as an answer.

Prerequisites

R packages:

`httr`

`jsonlite`

The one package that I find most useful is Hadley⁴'s [httr](#). It allows for easy crafting of API calls and also handling the more intricate aspects of APIs like authentication.

Working with JSON data is facilitated a lot by the [jsonlite](#) package. It does a good job translating JSON's nested data structures into sensible R objects. Well, most of the time, anyway.

Steps

So, these are the required steps we'll need to take to get our answer:

1. Retrieve a list of all the valid classifiers
2. Extract from that answer only those classifiers that relate to our problem
3. Retrieve the documents' meta data that are classified with one of the classifiers we've found to be relevant.
4. Work with the data we've retrieved to find out what is the gender ratio.

Steps (1) and (3) will involve calling the API and (2) and (4) are just local data processing chores.

Data from our Meetup group users

The screenshot shows a Google Chrome browser window with the URL https://secure.meetup.com/meetup_api/key/. The page title is "an API Key | Meetup - Google Chrome". The browser's address bar shows the URL and a "Secure" indicator. The page content includes a navigation bar with links: "Create a Meetup", "Invite", and "New App". The Meetup logo is centered at the top. Below the logo, there is a navigation menu with links: "Meetup API", "Documentation", "Console", "API Key" (highlighted in red), "OAuth Consumers", "Widget Foundry", "Applications", and "Client Libraries". The main heading is "Getting an API Key". Below the heading, there is a message: "Hello, Wojciech Francuzik, click the lock below to reveal your API key". A text input field contains a masked API key (represented by dots) and a lock icon. Below the input field, there is a paragraph of text: "You'll need to provide this key with every request you make to the Meetup API. Please try to keep this key to yourself. If you need to reset your key for any reason, you can do that below. Careful, resetting the key will cause any requests made with the old key to fail." Below the paragraph, there is a red button labeled "Reset my API key". At the bottom of the page, there is a dark blue footer with links: "Start a Meetup Group", "Log out", "Help", "About Us", "Jobs", "Apps", "API", "Topics", "Browse Countries", "Blog", "Tech Blog", "Made in NYC", "© 2017 Meetup", "Privacy", and "Terms". The browser's taskbar at the bottom shows several open files: "wichtige Infor....pdf", "team_acc_2017.jpg", "Dagmar Veltj....doc", "Organigramm....pdf", "plakat skala m....pdf", "zabiegi chiru....docx", and "pic02_ok.jpg". A "Show all" button is also visible in the taskbar.

an API Key | Meetup - Google Chrome

14:47 m x Medige x Optima x Inbox x GitHub x G women x 6a0105 x G meetup x Getting x Mój dys x Prezent x battle x azicGAA x G gender x Survey x Wojciech

Secure | https://secure.meetup.com/meetup_api/key/

Create a Meetup Invite **New App**

meetup

Meetup API Documentation Console **API Key** OAuth Consumers Widget Foundry Applications Client Libraries

Getting an API Key

Hello, Wojciech Francuzik, click the lock below to reveal your API key

..... 🔒

You'll need to provide this key with every request you make to the Meetup API. Please try to keep this key to yourself. If you need to reset your key for any reason, you can do that below. Careful, resetting the key will cause any requests made with the old key to fail.

Don't give away your API key. Your key exposes the Meetup groups you've joined, **even private groups**. It's personal and belongs to you, like your account password. If you do want a third party service to be able to use your key temporarily and give them the key, you can reset it by clicking the button below. Once reset, your old key is invalidated and no longer works with our API.

Reset my API key


Start a Meetup Group Log out

Help About Us Jobs Apps API Topics Browse Countries Blog Tech Blog Made in NYC

© 2017 Meetup Privacy Terms


wichtige Infor....pdf team_acc_2017.jpg Dagmar Veltj....doc Organigramm....pdf plakat skala m....pdf zabiegi chiru....docx pic02_ok.jpg Show all

Methods!



Meetup API **Documentation** Console API Key OAuth Consumers Widget Foundry Applications Client Libraries

Extend your community



Meet the API

The Meetup API provides simple [RESTful](#) HTTP and streaming interfaces for exploring and interacting Meetup platform from your own apps.

Community

Test out your idea

Follow up on Twitter

API methods

Type	Method
v3 abuse	
POST	/:username/abuse_reports
POST	/self/abuse_reports
GET	/self/blocks/:member_id
POST	/self/blocks/:member_id
DELETE	/self/blocks/:member_id
v3 batch	
POST	/batch
v3 boards	
GET	/:username/boards
GET	/:username/boards/:bid/d...
GET	/:username/boards/:bid/d...
v2 categories	
GET	/2/categories
v2 cities	
GET	/2/cities
v3 comments	

API Console

[What's this?](#)

GET

<https://api.meetup.com/2/members>

☐ Prefer secure photo links

topic

groupnum

group_urlname

Berlin-R-Users-Group

member_id

self

fields

group_id

service

order

API Methods

Type Method

v3 abuse

GET /self/blocks/:member_id

v3 boards

GET </:urlname/boards>

GET </:urlname/boards/:bid/d...>

GET </:urlname/boards/:bid/d...>

v2 categories

GET </2/categories>

v2 cities

GET </2/cities>

v3 comments

GET </:urlname/events/:event...>

GET </:urlname/events/:event...>

v2 dashboard

GET </dashboard>

v3 events

Signed URL

What's this?

```
https://api.meetup.com/2/members?  
member_id=60447902&offset=0&format=json&group_urlname=Berlin-R-Users-  
Group&photo-  
host=public&page=20&order=name&sig_id=60447902&sig=4c61c0c7ccd5f2b2d70833
```

HTTP/1.1 200 success

```
{  
  "results": [  
    {  
      "country": "de",  
      "hometown": "Poznan",  
      "city": "Berlin",  
      "topics": [  
        {  
          "urlkey": "medicine",  
          "name": "Medicine",  
          "id": 23576  
        },  
        {  
          "urlkey": "medical-device-technology",  
          "name": "Medical Device Technology",  
          "id": 27603  
        }  
      ]  
    }  
  ]  
}
```

Here we shall show the script

https://github.com/wolass/BRUG_API/script

CURRENT STATUS

Who is new to working with
APIs?

Who has worked with ANY
kind of API before?

OUR QUESTION:

How many women should we expect to see on our meetups based on the member's data of our meetup group?

A bit of problem along the way????

NOT AT ALL!!! :)

Limits

By default we limit users to 200 requests per hour, and 200 max results for each request.

gender	Optional fields parameter. Members can only see their own gender. May be one of other, none, female, male
hometown	Hometown of member
id	The member's id

HINT HINT HINT - This is not a new problem. Other R users had the same problem :)

After you finish - please share your results

the links for sharing can be found here:

https://github.com/wolass/BRUG_API

or directly :

<https://goo.gl/forms/XaWQuBh1vQQAPQhq2>