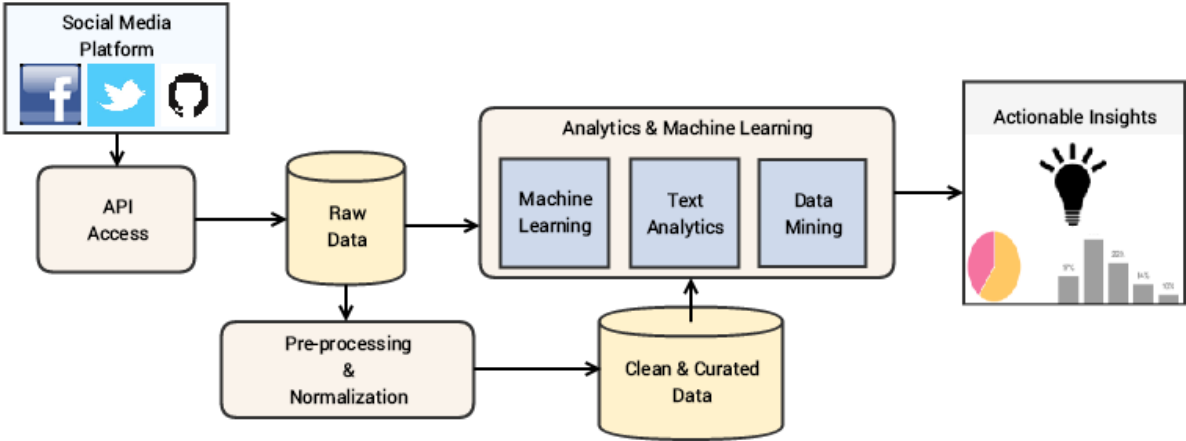
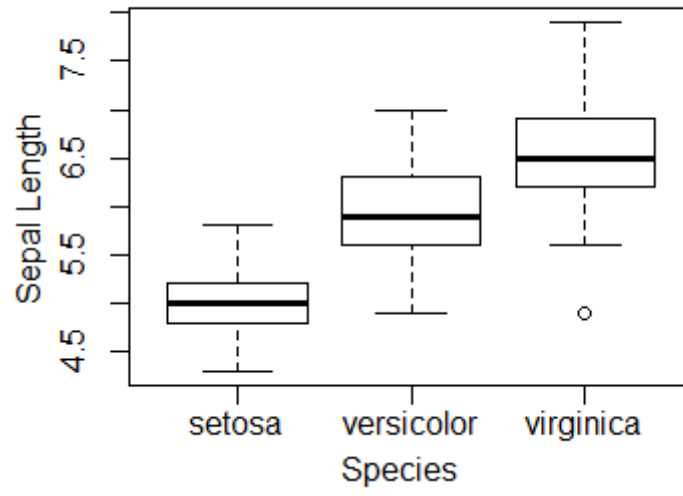


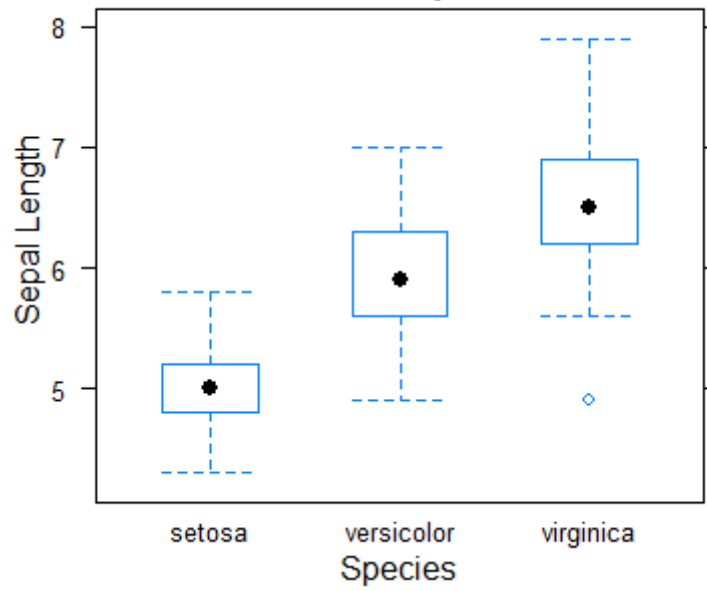
# Chapter 1: Getting Started with R and Social Media Analytics

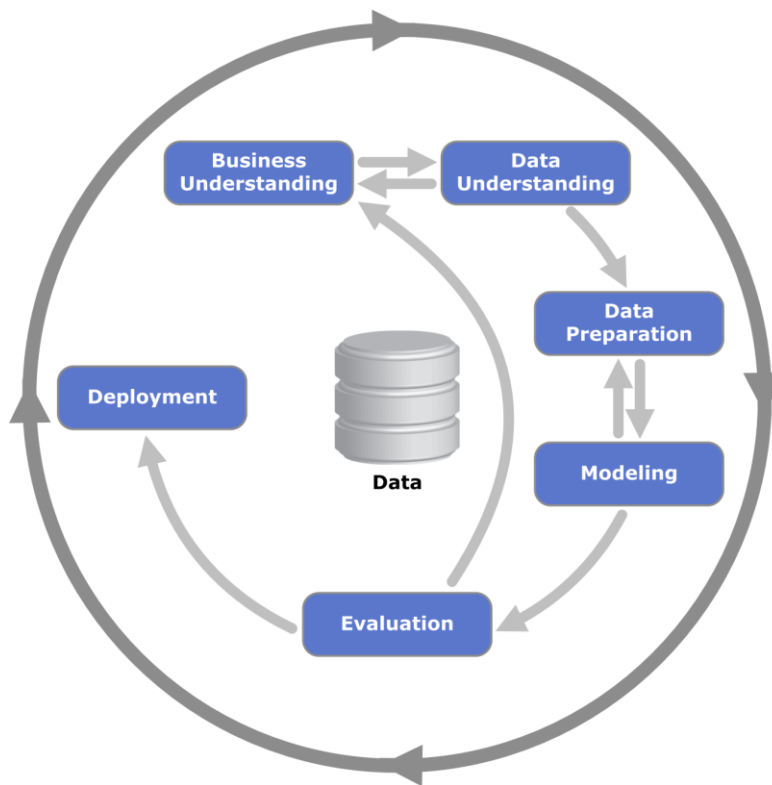
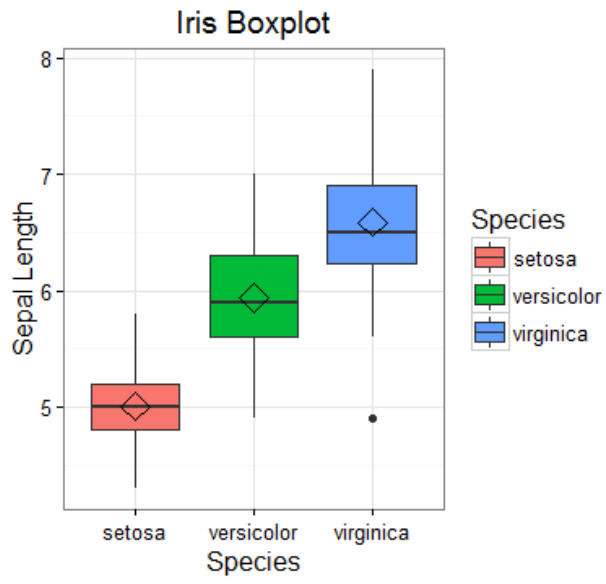


**Iris Boxplot**

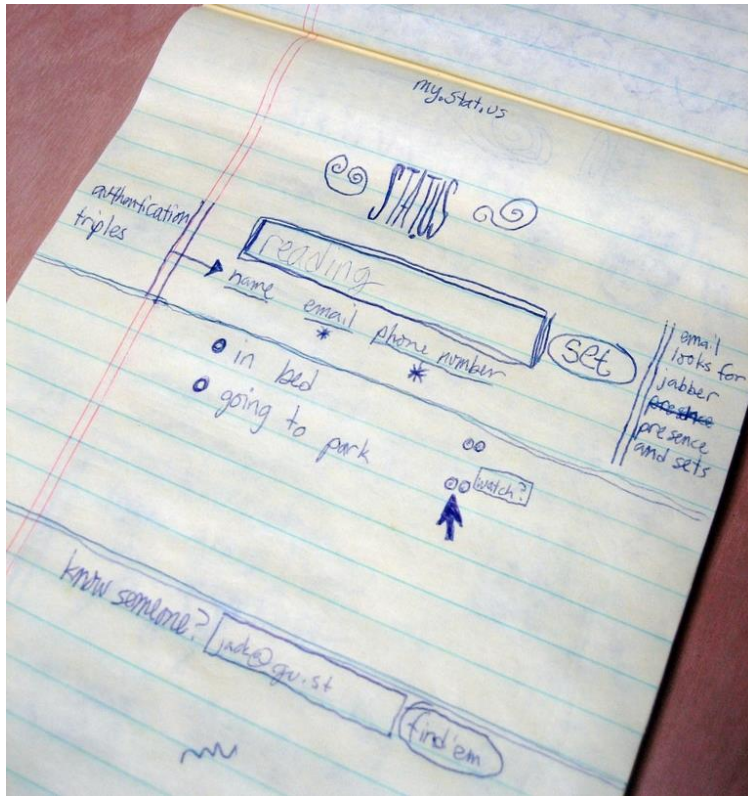


**Iris Boxplot**





## Chapter 2: Twitter – What's Happening with 140 Characters





# Twitter\_Ismar

Test OAuth

- Details
- Settings
- Keys and Access Tokens
- Permissions



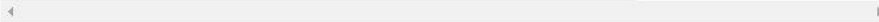
Twitter Analysis for Learning Social Media Analysis with R, chapter 2  
<https://www.packtpub.com>

## Organization

Information about the organization or company associated with your application. This information is optional.

Organization Packt Publishing

Organization website <https://www.packtpub.com>



## Application Settings

Your application's Consumer Key and Secret are used to *authenticate* requests to the Twitter Platform.

Access level Read and write (modify app permissions)

# Twitter\_Ismar

Test OAuth

Details Settings **Keys and Access Tokens** Permissions

## Application Settings

Keep the "Consumer Secret" a secret. This key should never be human-readable in your application.

Consumer Key (API Key)	[REDACTED]
Consumer Secret (API Secret)	[REDACTED]
Access Level	Read and write (modify app permissions)
Owner	Rghv_Bali
Owner ID	[REDACTED]

### Application Actions

Regenerate Consumer Key and Secret Change App Permissions

## Your Access Token

This access token can be used to make API requests on your own account's behalf. Do not share your access token secret with anyone.

Access Token	[REDACTED]
Access Token Secret	[REDACTED]
Access Level	Read-only
Owner	Rghv_Bali

```
> setup_twitter_oauth(consumer_key = CONSUMER_KEY,consumer_secret = CONSUMER_SECRET)
[1] "Using browser based authentication"
use a local file ('.htrr-oauth'), to cache OAuth access credentials between R sessions?

1: Yes
2: No

selection: 2|
```

## Authorize Twitter\_Ismar to use your account?



Twitter\_Ismar

By Packt Publishing

[www.packtpub.com](http://www.packtpub.com)

Twitter Analysis for Learning Social Media Analysis with R, chapter 2

Remember me · [Forgot password?](#)

Sign In

Cancel

### This application will be able to:

- Read Tweets from your timeline.
- See who you follow, and follow new people.
- Update your profile.
- Post Tweets for you.

### Will not be able to:

- Access your direct messages.
- See your Twitter password.

← → ↻ 🏠 ⓘ localhost:1410/?oauth\_token=MJI8CwAAAAAAyEhd,

Authentication complete. Please close this page and return to R.

```
> tweets
[[1]]
[1] "jack: @iSocialFanz @twitter @ciszek not sure what you mean"

[[2]]
[1] "jack: @Snowden reasonable and something we'll think about"

[[3]]
[1] "jack: And these 5 (Alyssa, Francoise, Sarah, Jackie, and Hillary) own and drive the majority of our revenue https://t.co/rs20H9gvq1"

[[4]]
[1] "jack: \"we have to exercise and spread the idea that critical thinking matters now more than ever...\" #PardonSnowden"

[[5]]
[1] "jack: #PardonSnowden (and watch this) https://t.co/LI1e3gfcNW"
```







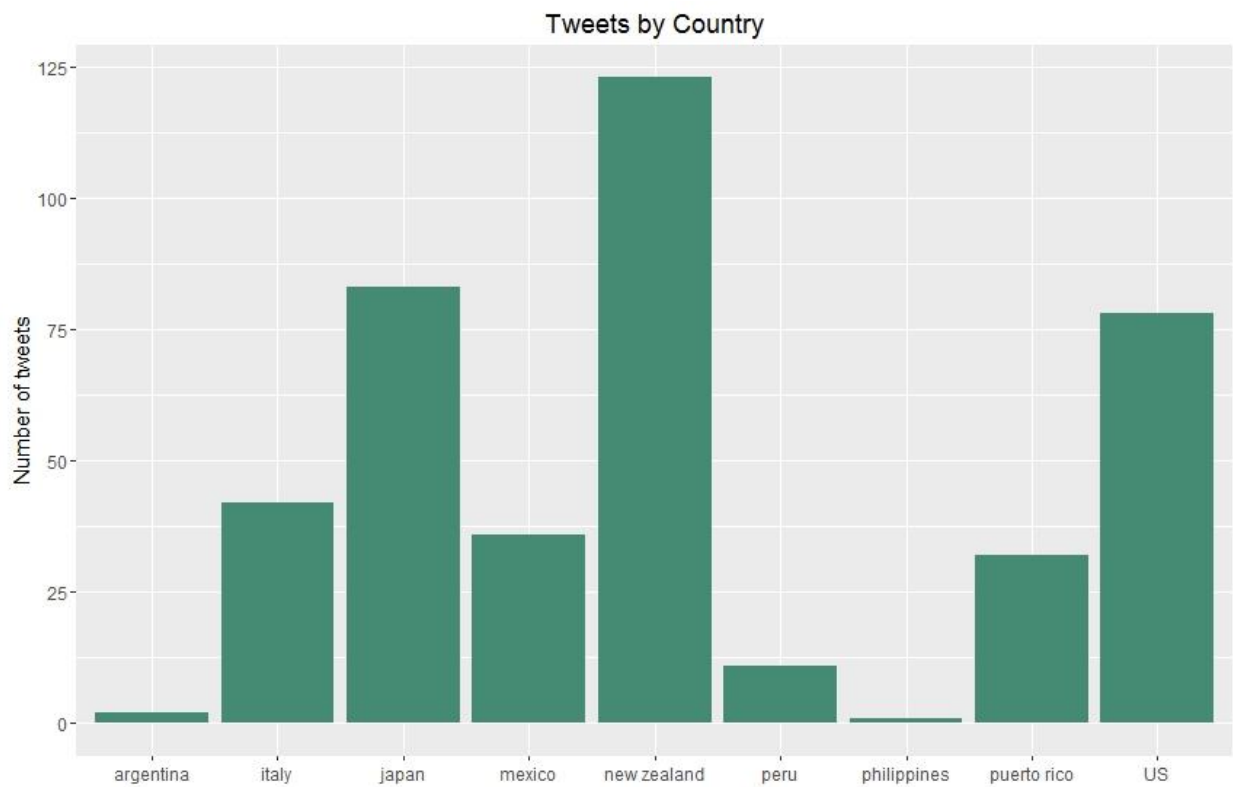
**Earthquake Alerts**

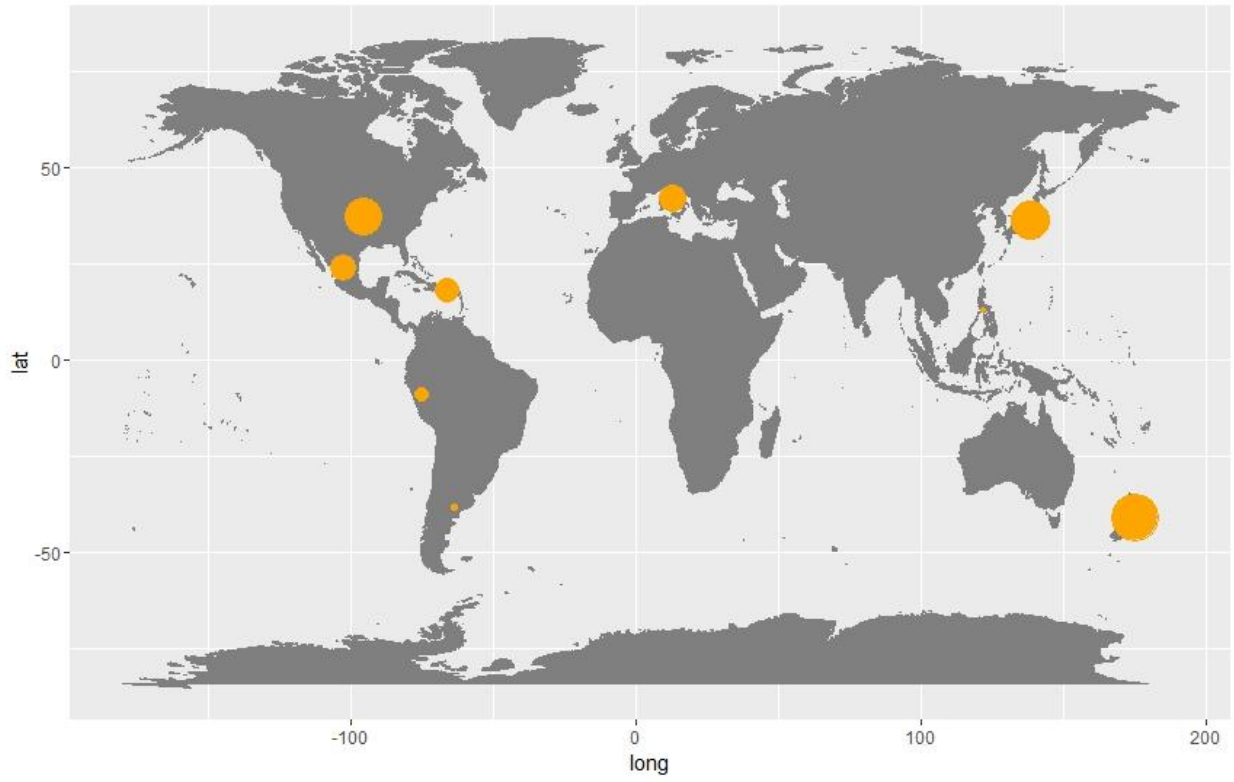
@QuakesToday



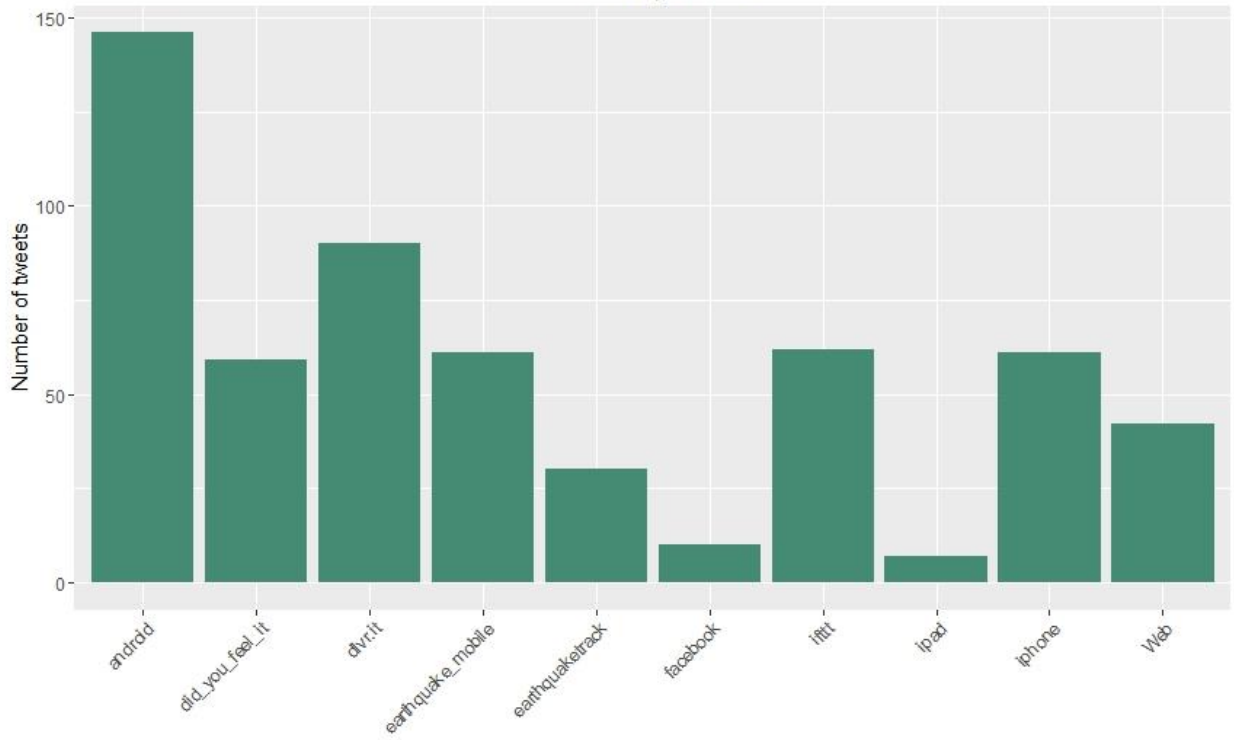
Follow

4.9 magnitude [#earthquake](#). 95km WNW of L'Esperance Rock, New Zealand  
[earthquaketrack.com/quakes/2016-12 ...](http://earthquaketrack.com/quakes/2016-12...)

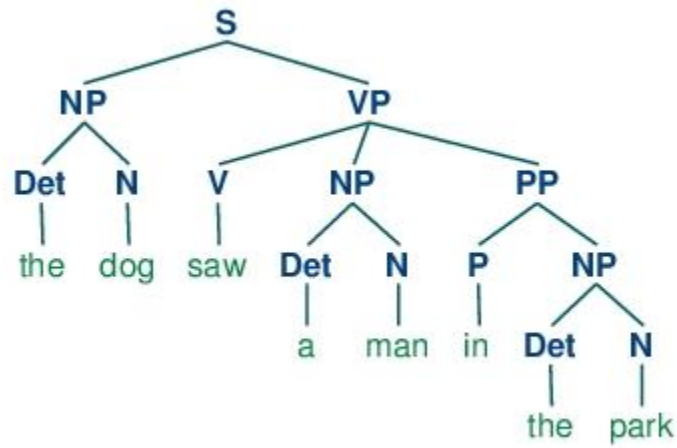




Tweets by Source

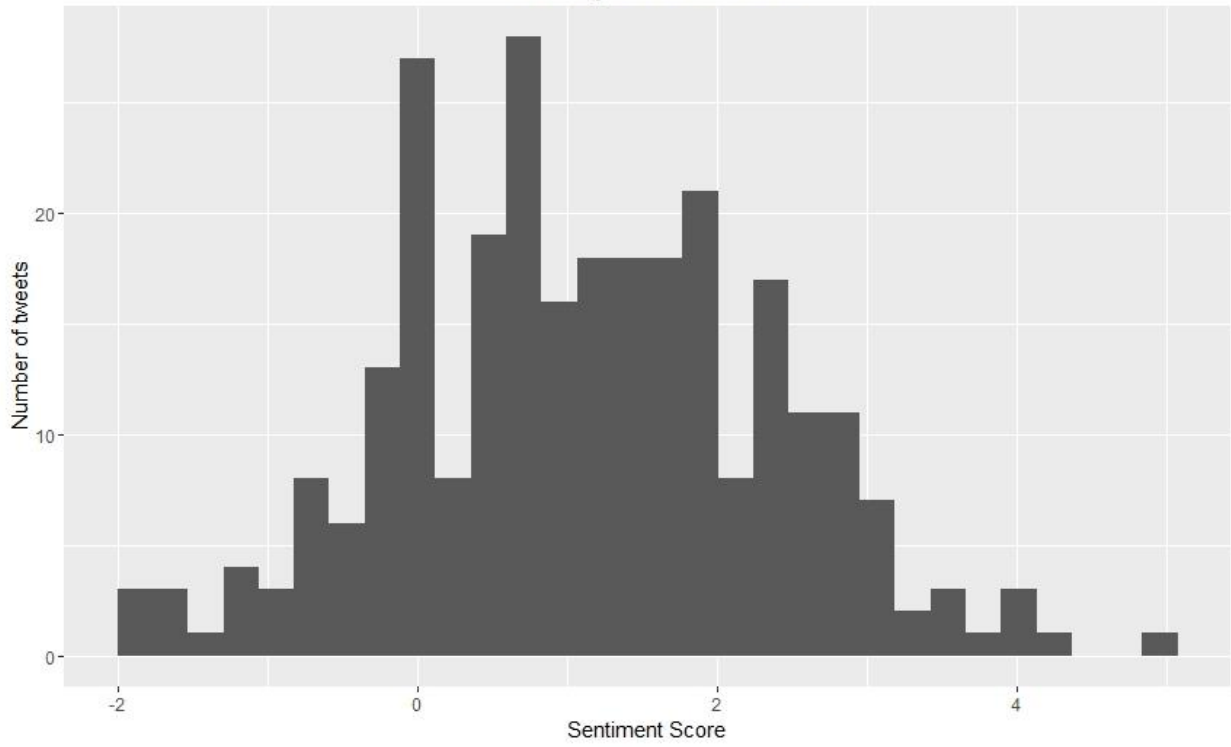


@annalaamas1  
@from\_japan  
@earthquake\_jp  
@earthbrook  
@wikisismos  
@gurkha\_brigade  
**@quakestoday**  
@emsc @earthquakeapp  
@univuda  
@lastquake@cnn @jaketapper  
@quakesinca @akhlasi

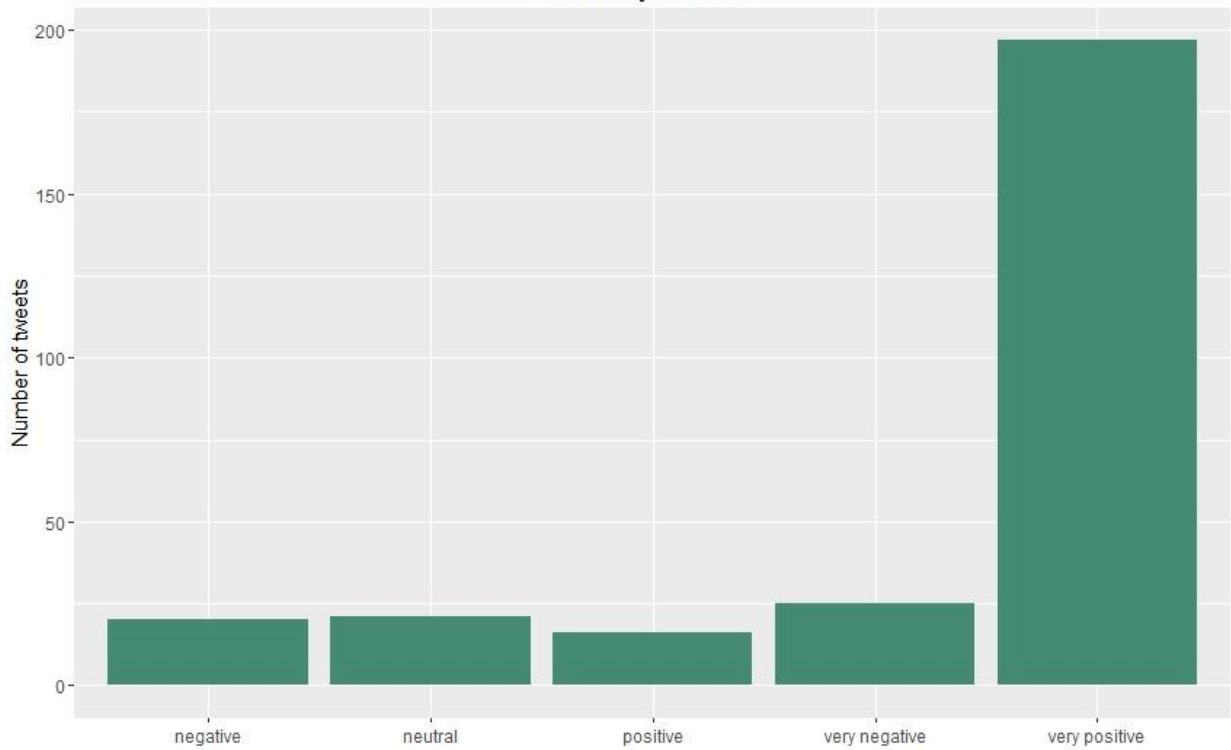




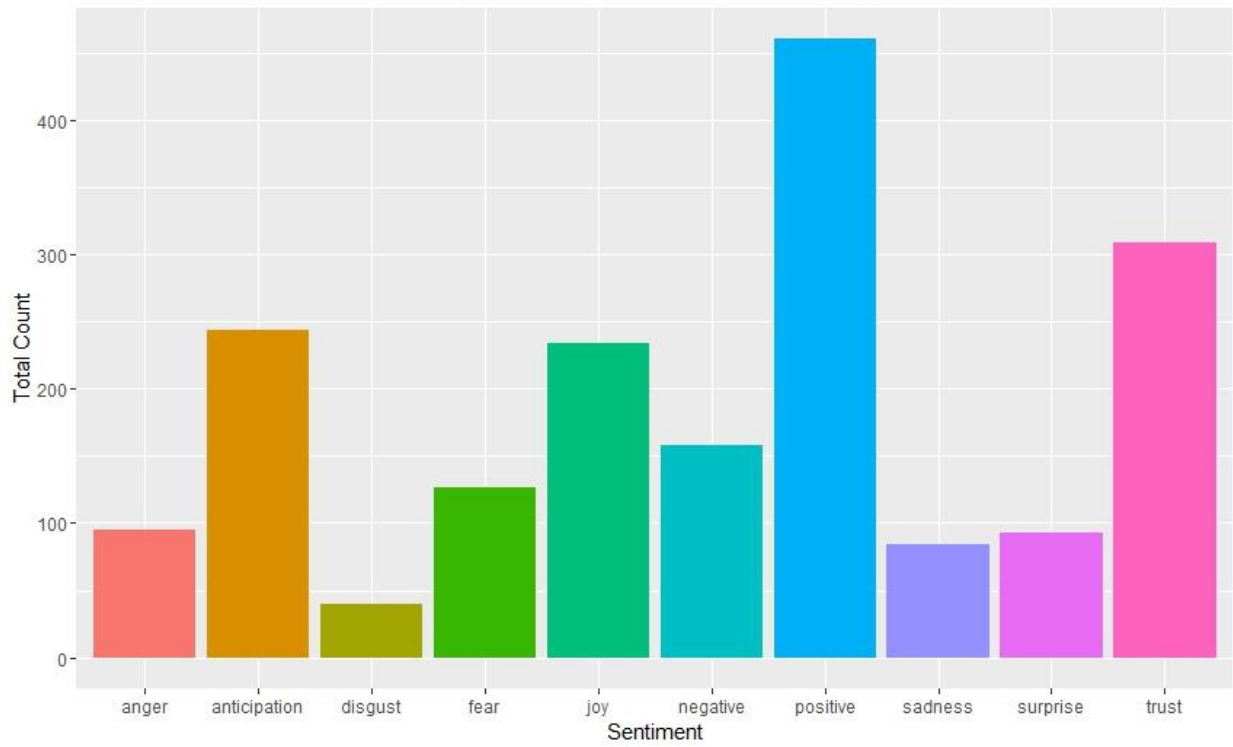
Tweets by Sentiment Score



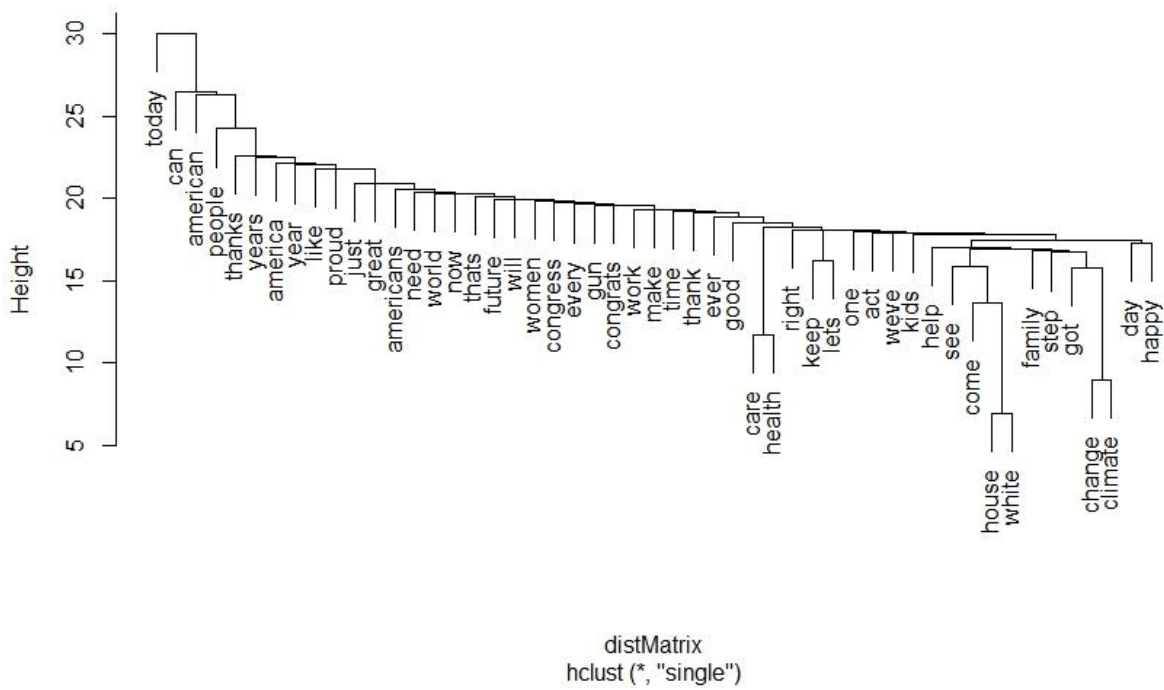
Tweets by Sentiment



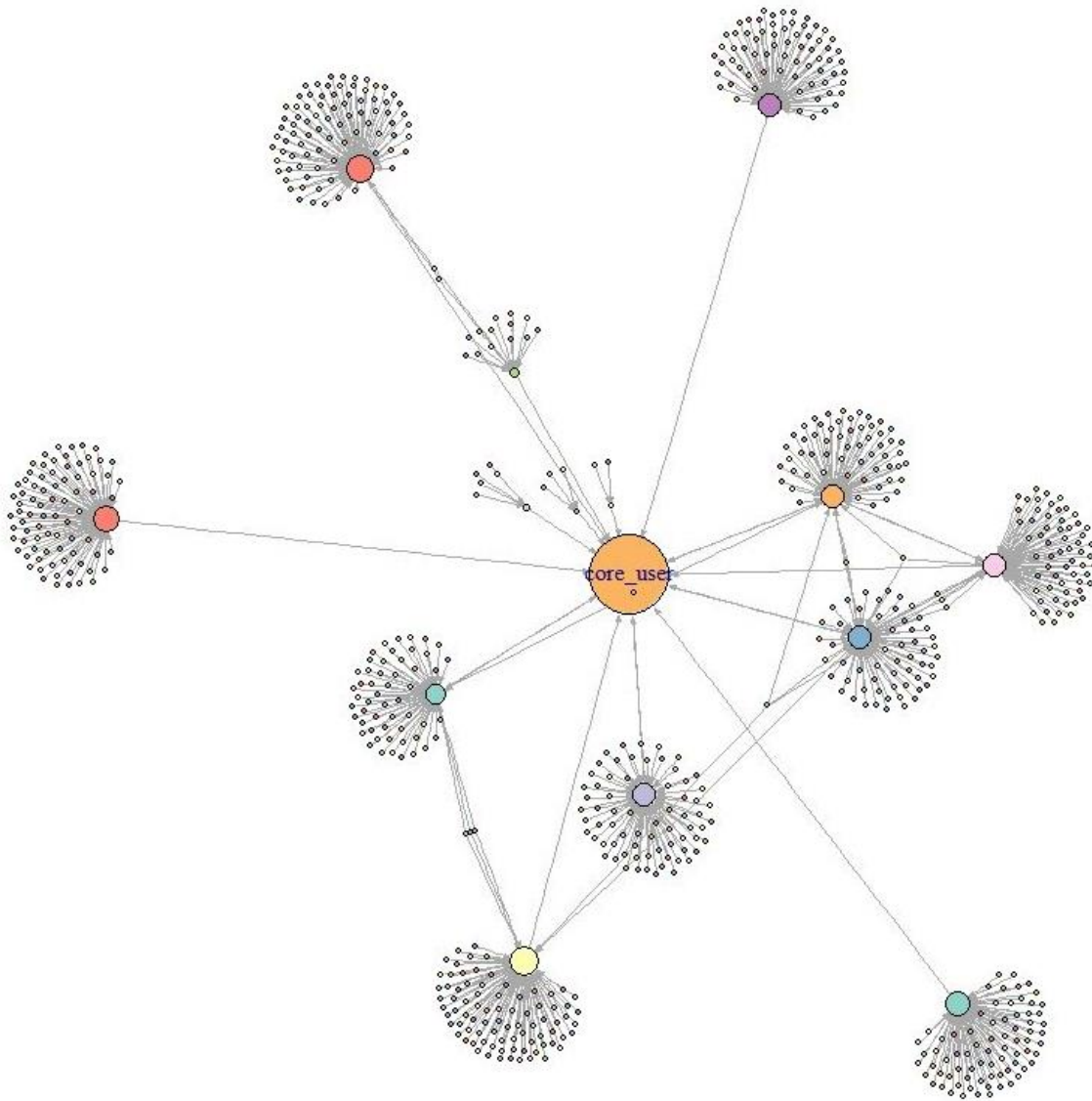
Total Sentiment Score for All Tweets

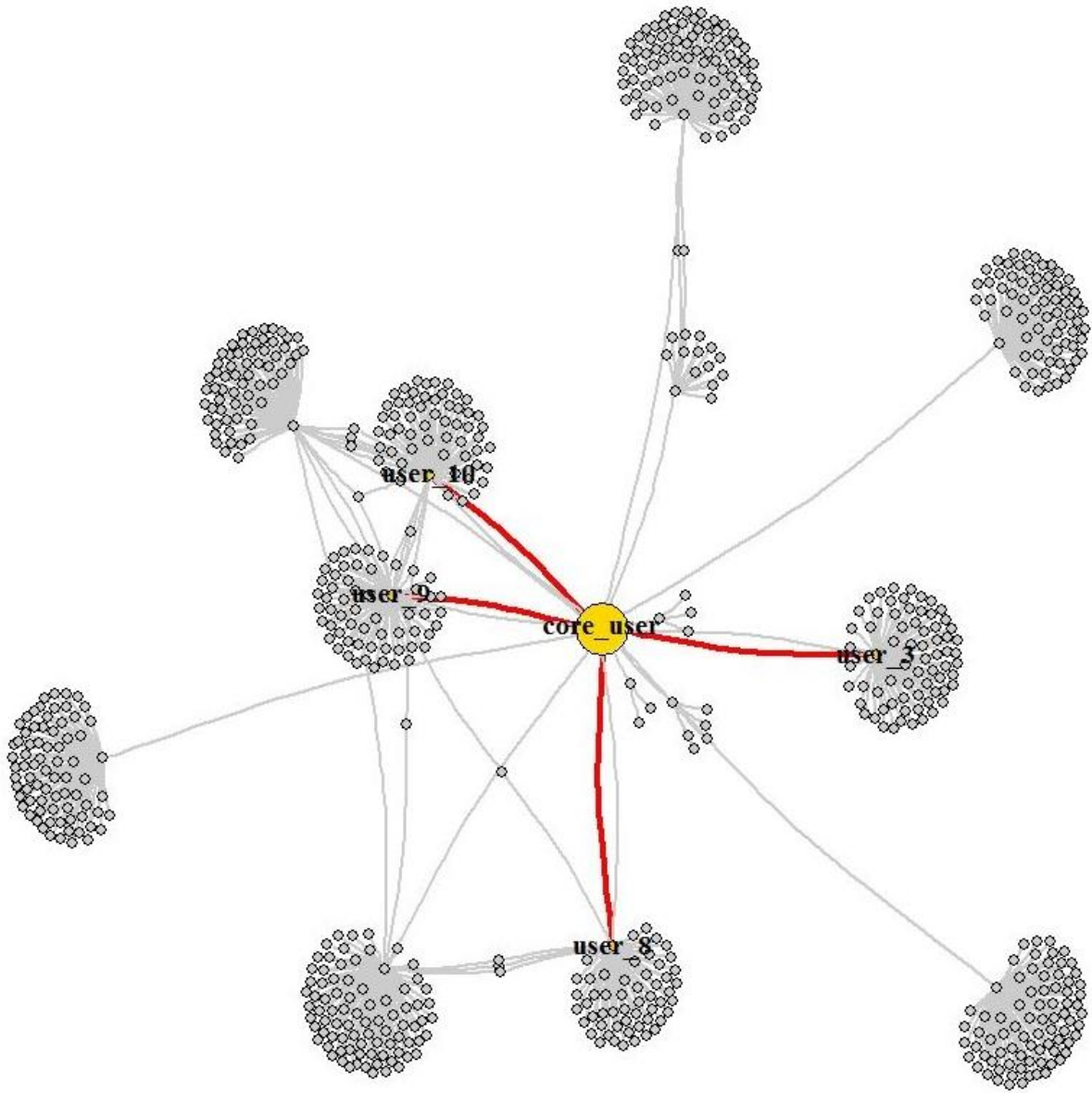


Cluster Dendrogram



	from	to
1	user_2	core_user
2	user_4	core_user
3	user_6	core_user
4	user_12	core_user
5	user_10	core_user
6	user_9	core_user
7	user_13	core_user
8	user_1	core_user
9	user_7	core_user
10	user_14	core_user







# Chapter 3: Analyzing Social Networks and Brand Engagements with Facebook



Secure | <https://developers.facebook.com/tools/explorer/>

facebook for developers | Products Docs Tools & Support News Success Stories

Graph API Explorer

Application: [?] Graph API Explorer

Access Token: EAACEdEose0cBABL3eWFnpHZCH9t1aSmEmAtBh4sMGZCdy7NX11ffsmhEqo9ZAw5kfi56gf7i9jU9bu82kUnl2B79DhwdXZAYOfUDbQo!

GET → /v2.8 /me?fields=id,name

- Get Token
- Get User Access Token
- Get App Token
- Uninstall the app
- Get Page Access Token

GET → /v2.8 /me

Submit

Learn more about the Graph API syntax

Node: me

+ Search for a field

```
{
  "name": "Dipanjan Sarkar",
  "id": "102 6544"
}
```



GET → /v2.8 / 220832481274508?fields=id,name,likes



Submit

Learn more about the Graph API syntax

Node: 220832481274508

- id
- name
- likes
- ...
- + Search for a field

+ Search for a field

```
{
  "id": "220832481274508",
  "name": "Premier League",
  "likes": {
    "data": [
      {
        "name": "TAG Heuer",
        "id": "6466223654"
      },
      {
        "name": "Carling",
        "id": "105108459560429"
      },
      {
        "name": "Hull Tigers",
        "id": "258479264536"
      },
      {
        "name": "Middlesbrough FC",
        "id": "386636354690970"
      },
      {
        "name": "Burnley Football Club",
        "id": "157574800929706"
      },
      {
        "name": "Watford FC",
        "id": "21223691814"
      }
    ]
  }
}
```

### Netvizz v1.41

Netvizz is a tool that extracts data from different sections of the Facebook platform - in particular groups and pages - for research purposes. File outputs can be easily analyzed in standard software.

For **questions**, please consult the [FAQ](#) and [privacy](#) sections. Non-commercial use only.

This is a new version of Netvizz designed to work with Facebook's API v2.6. Please check the [FAQ](#) for how to report problems.

---

The following modules are currently available:

**group data** - creates networks and tabular files for user activity around posts on **groups**

**page data** - creates networks and tabular files for user activity around posts on **pages**

**page like network** - creates a network of **pages** connected through the likes between them

**page timeline images** - creates a list of all images from the "Timeline Photos" album on **pages**

**search** - interface to Facebook's **search function**

**link stats** - provides statistics for **links** shared on Facebook

Big pages or groups can take some time to process (minutes or hours). **Be patient and try not to reload!**

---

	name	id	gender	birthday
1	Dipanjn Sarkar	1020 6544	male	12/18/1990

	name	id
1	Johnny Juel	5702
2	Houston Tancredi	5875
3	Eddie Artist	6225
4	Paula Bauder	10152
5	Noble Towe	7100
6	Ira Denman	716

1	female	3
2	male	37

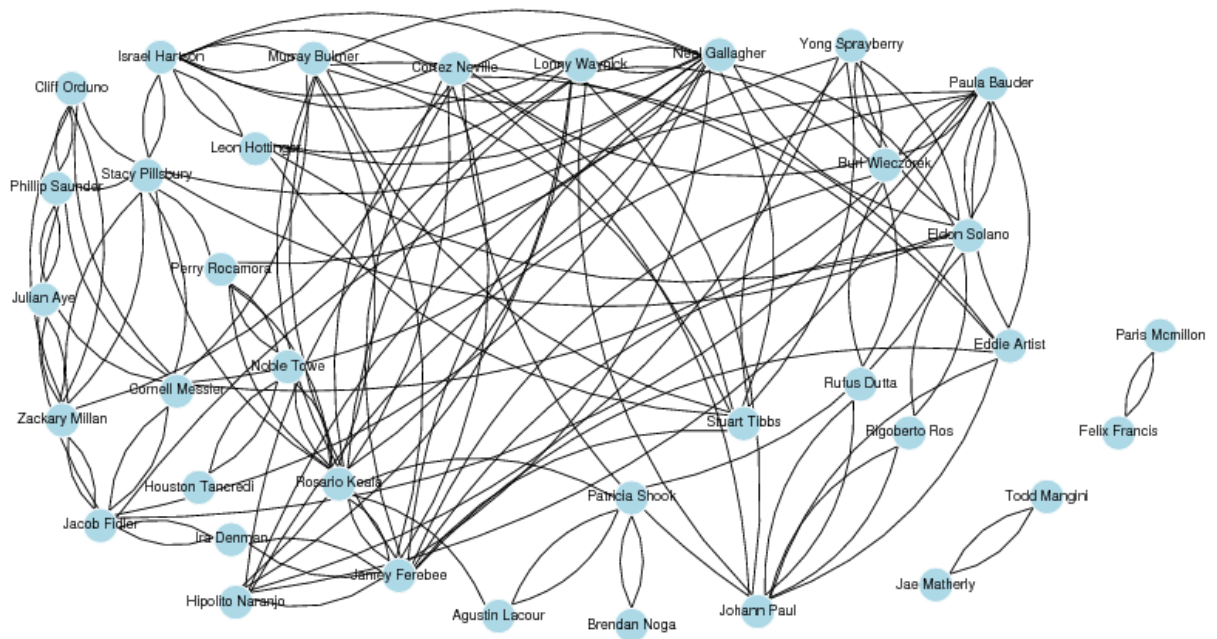
1	In a relationship	10
2	Married	13
3	Single	17

1	Bangalore, India	18
2	Kansas, US	5
3	Manchester, UK	4
4	Melbourne, Australia	3
5	Mumbai, India	3
6	Noida, India	2
7	Malaysia	2
8	Singapore	2

1	In a relationship	female	0
2	Married	female	2
3	Single	female	1
4	In a relationship	male	10
5	Married	male	11
6	Single	male	16

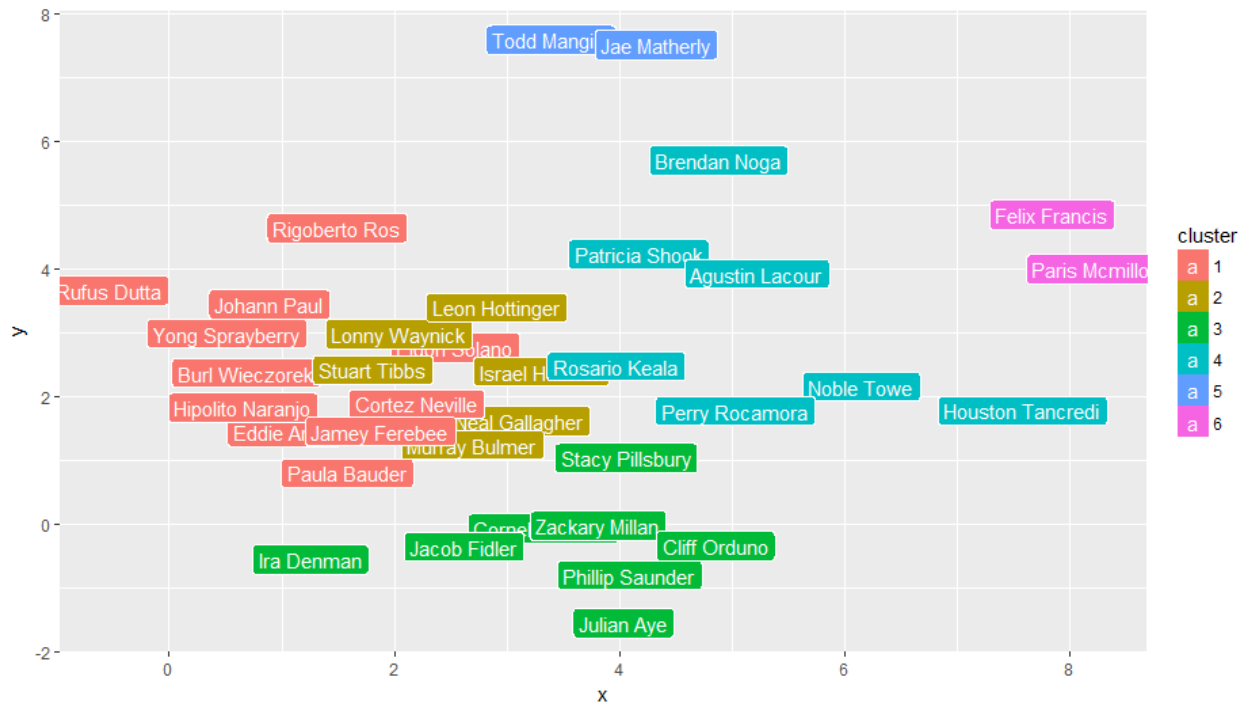
	names	freq
1	Facebook	12
2	IIIT Bangalore	11
3	Sachin Tendulkar	10
4	Premier League	8
5	Swami Vivekananda	8
6	A.R. Rahman	8
7	The Hindu	8
8	La Liga	8
9	Bill Gates	7
10	Coursera	7

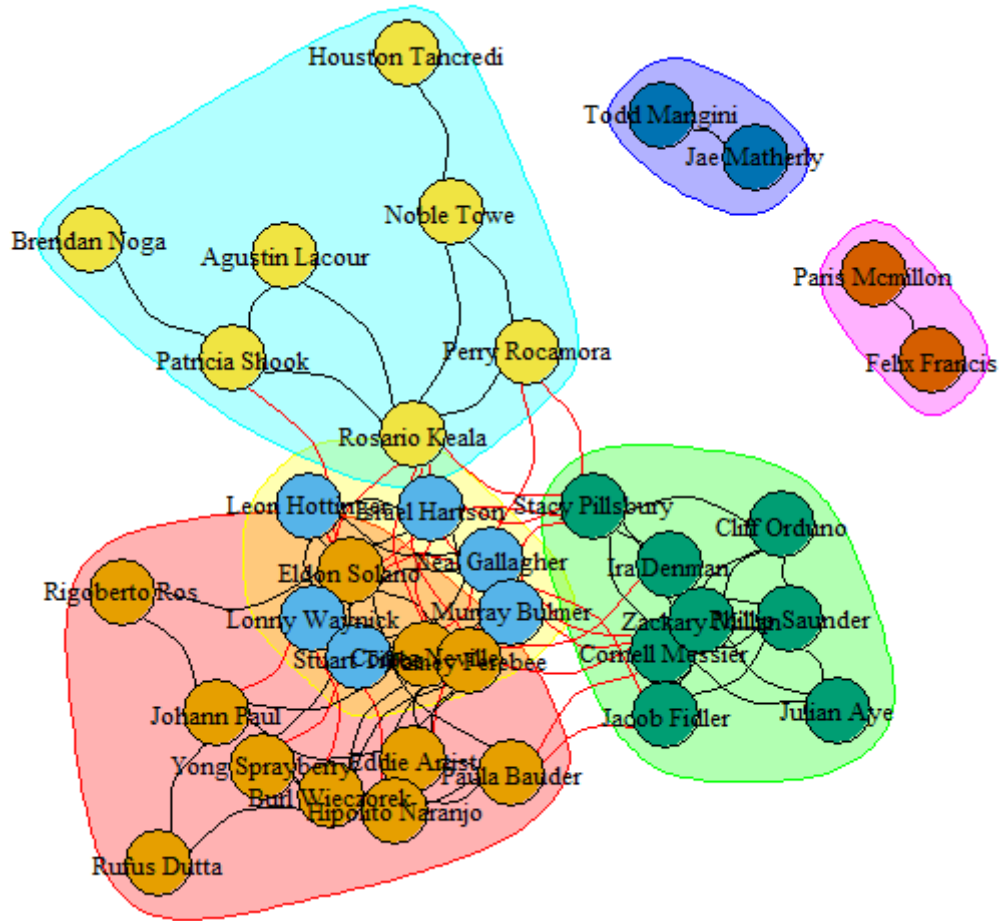
	names	freq
2	Facebook	12
3	IIIT Bangalore	11
5	Sachin Tendulkar	10
6	Premier League	8
10	La Liga	8
17	Swami Vivekananda	8
20	Coursera	6
21	Google	6
22	Indian Cricket Team	6
23	Intel	6



Name	Degree	Name	Indegree	Name	Outdegree
Neal Gallagher	15	Eddie Artist	5	Neal Gallagher	10
Jamey Ferebee	15	Paula Bauder	5	Jamey Ferebee	10
Rosario Keala	14	Phillip Saunde	5	Rosario Keala	9
Cortez Neville	13	Eldon Solano	5	Cortez Neville	8
Eldon Solano	12	Lonny Waynick	5	Eldon Solano	7
Lonny Waynick	12	Cornell Messier	5	Lonny Waynick	7
Murray Bulmer	12	Neal Gallagher	5	Murray Bulmer	7
Paula Bauder	11	Leon Hottinger	5	Paula Bauder	6
Stacy Pillsbury	11	Stacy Pillsbury	5	Stacy Pillsbury	6
Jacob Fidler	10	Burl Wiczorek	5	Jacob Fidler	5

Name	Closeness	Name	Betweenness
Neal Gallagher	0.1758794	Rosario Keala	160.91726
Cortez Neville	0.1758794	Zackary Millan	110.83373
Jamey Ferebee	0.1741294	Stacy Pillsbury	110.41687
Eldon Solano	0.1724138	Paula Bauder	109.17143
Rosario Keala	0.1724138	Eldon Solano	99.08433
Murray Bulmer	0.1715686	Jacob Fidler	96.87500
Lonny Waynick	0.1699029	Jamey Ferebee	84.67063
Stacy Pillsbury	0.1699029	Lonny Waynick	84.56091
Cornell Messier	0.1674641	Cortez Neville	82.50397
Paula Bauder	0.1658768	Israel Hartson	77.05833





## Netvizz v1.4.1

### Page Like Network Module

This module starts with a selected page (the "seed") and retrieves all the pages that page likes. It will continue until the specified crawl depth is reached (currently limited to 2). The output is a network file (gdf format) containing a (directed) network of pages. Because node ids are unique, you can combine several networks in gephi.

page id (find page ids [here](#) or through Netvizz' [search module](#))

depth (max 2)

[start](#)

#### File Column Explanations

For more details check the API reference for [page objects](#).

#### page network (directed) - gdf format - nodes are pages

*name*: the page id

*label*: the page name

*username*: the page username

*category*: page category according to Facebook's ontology

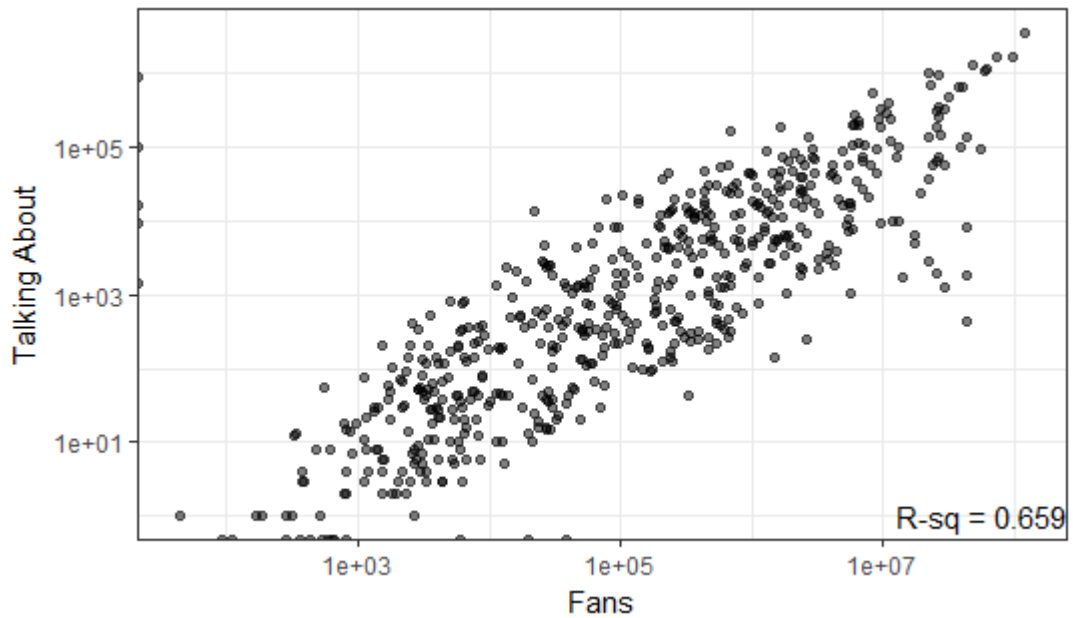
*post\_activity*: posts per hour, based on the last 50 posts

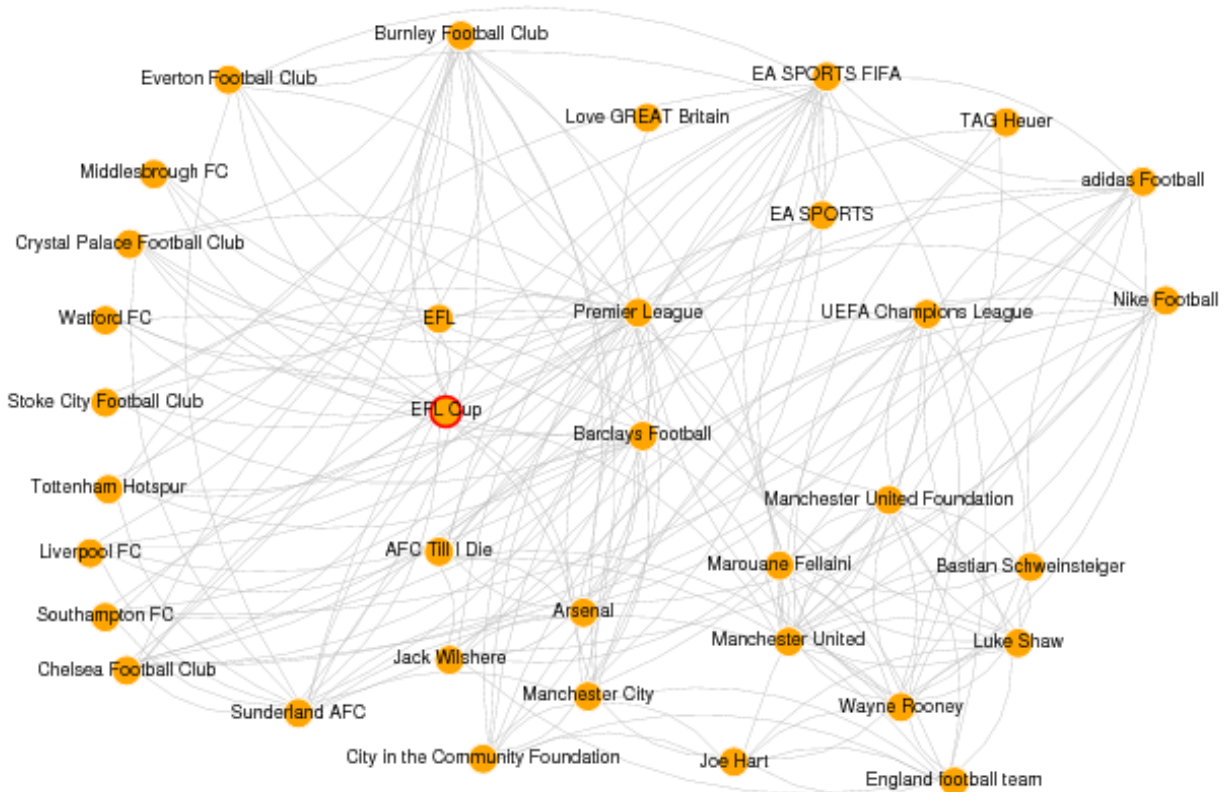
	id	name	category	fans	talking_about	post_activity
1	10	Premier League	Sports League	39301910	634081	0.31
2	20	TAG Heuer	Jewelry/Watches	2823063	30796	0.14
3	30	Carling	Food & Beverage Company	200508	12078	0.03
4	40	Hull Tigers	Sports Team	1000560	40500	0.23
5	50	Middlesbrough FC	Sports Team	431967	25042	0.29
6	60	Burnley Football Club	Sports Team	352042	3279	0.19
7	70	Watford FC	Sports Team	362231	11308	0.11
8	80	AFC Bournemouth	Sports Team	326942	12651	0.54
9	90	Leicester City Football Club	Sports Team	6554721	218176	0.51
10	100	Crystal Palace Football Club	Sports Team	1004518	18338	0.27



Category	Count	name	category	fans
Athlete	151	Cristiano Ronaldo	Athlete	118925300
Sports Team	77	FC Barcelona	Sports Team	95491169
Community	31	Manchester United	Sports Team	72214897
Product/Service	26	UEFA Champions League	Sports League	60636892
Non-Profit Organization	21	Neymar Jr.	Athlete	59214746
Company	20	David Guetta	Musician/Band	54789663
Local Business	16	Chelsea Football Club	Sports Team	47253090
Games/Toys	15	Nike Football	Product/Service	42498785
Sports League	14	Nike Football	Product/Service	42498683
Travel Company	13	Nike Football	Product/Service	42498679

name	category	talking_about	name	category	post_activity
Cristiano Ronaldo	Athlete	3532172	SportPesa Care	Product/Service	21.74
FC Barcelona	Sports Team	1633078	GiveMeSport - Football	News/Media Website	10.54
Manchester United	Sports Team	1618239	Virgin Media	Telecommunication Company	9.94
Chelsea Football Club	Sports Team	1301568	Neymar Jr.	Athlete	8.77
UEFA Champions League	Sports League	1168555	Delta	Travel Company	2.83
Neymar Jr.	Athlete	1085169	Juan Mata	Athlete	2.37
Etihad Stadium	Stadium	1043577	The Sims	Games/Toys	2.23
Sergio Ramos	Athlete	1027324	Sky Sports	TV Network	2.18
LaLiga	Sports League	970684	ESPN UK	Media/News Company	2.02
Stamford Bridge	Stadium	862744	Sergio Ramos	Athlete	1.67





	Premier League	Manchester United	Manchester City	Liverpool FC	Arsenal	Chelsea Football Club
<i>Premier League</i>	0	1	1	1	1	1
<i>Manchester United</i>	1	0	2	2	2	2
<i>Manchester City</i>	1	2	0	2	2	2
<i>Liverpool FC</i>	1	2	2	0	2	2
<i>Arsenal</i>	1	2	2	2	0	2
<i>Chelsea Football Club</i>	1	2	2	2	2	0

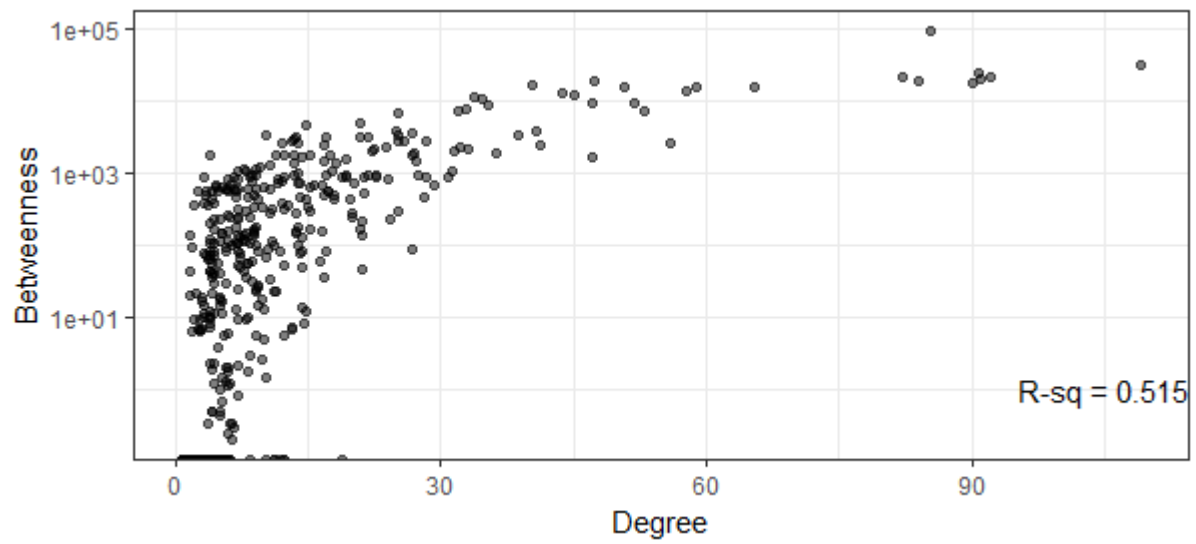
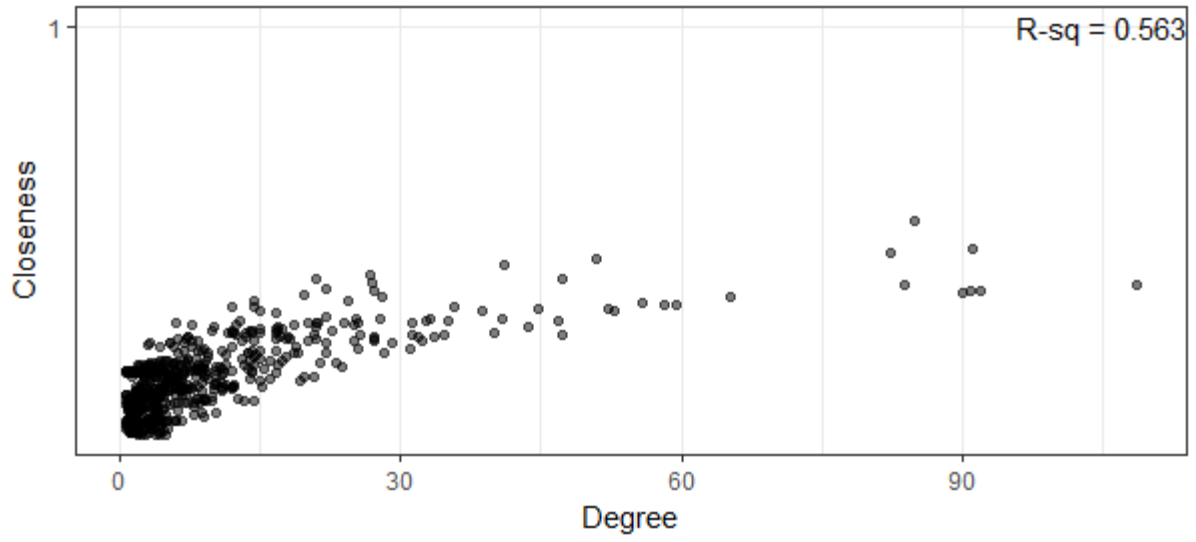
### Core Pages

	Page	PageCoreness
1	Premier League	11
6	Burnley Football Club	11
10	Crystal Palace Football Club	11
11	West Ham United	11
12	Southampton FC	11
14	Everton Football Club	11
15	Nike Football	11
16	West Bromwich Albion	11
17	Tottenham Hotspur	11
18	Swansea City Football Club	11
19	Sunderland AFC	11
20	Stoke City Football Club	11
21	Manchester United	11
22	Manchester City	11
23	Liverpool FC	11

### Periphery Pages

	Page	PageCoreness
34	Henrik Lundqvist	1
37	Cara Delevingne	1
38	La Carrera Panamericana	1
39	Patrick Dempsey	1
40	Dempsey Racing	1
52	The Carling Local at V Festival	1
57	Tigers Trust	1
59	Hull Tigers Commercial™	1
60	Hull Tigers Arabic	1
61	Andy Dawson Testimonial	1
84	Safehands Nursery at Barnoldswick	1
88	Liv Fox Photography	1
89	Split Screen Wedding Dreams	1
94	Alex O'Neill Photography	1
95	Pier Fun Casinos Event Management Ltd	1

	Name	Degree		Name	Closeness		Name	Betweenness
22	Manchester City	109	1	Premier League	0.5340074	1	Premier League	96082.15
24	Arsenal	92	19	Sunderland AFC	0.4874161	22	Manchester City	32242.45
15	Nike Football	91	6	Burnley Football Club	0.4805624	19	Sunderland AFC	24583.19
19	Sunderland AFC	91	26	Barclays Football	0.4723577	24	Arsenal	22258.68
25	Chelsea Football Club	90	129	EFL Cup	0.4611111	6	Burnley Football Club	21872.56
1	Premier League	85	366	606	0.4469231	15	Nike Football	21232.93
21	Manchester United	84	243	EA SPORTS FIFA	0.4418251	21	Manchester United	19781.41
6	Burnley Football Club	82	150	The Offside Rule (We Get It!) Podcast	0.4411541	243	EA SPORTS FIFA	19013.00
14	Everton Football Club	65	156	The H and C News Football Pie League	0.4365139	25	Chelsea Football Club	18181.46
23	Liverpool FC	59	22	Manchester City	0.4342302	2	TAG Heuer	16698.68



	Name	EVcentrality		Name	PageRank
1	Premier League	1.0000000	15	Nike Football	0.027226678
21	Manchester United	0.9756104	24	Arsenal	0.019968333
22	Manchester City	0.9193786	21	Manchester United	0.018352130
24	Arsenal	0.7601505	25	Chelsea Football Club	0.017139476
262	Wayne Rooney	0.7497510	22	Manchester City	0.013780236
15	Nike Football	0.7217245	558	adidas Football	0.013302024
25	Chelsea Football Club	0.6871378	245	PSG - Paris Saint-Germain	0.011784058
19	Sunderland AFC	0.6842139	1	Premier League	0.011723774
445	UEFA Champions League	0.6432694	445	UEFA Champions League	0.009690068
6	Burnley Football Club	0.6300486	264	Nike	0.008748710

	Name	AuthScore
21	Manchester United	1.0000000
24	Arsenal	0.9619702
1	Premier League	0.9178324
22	Manchester City	0.8847690
25	Chelsea Football Club	0.8299846
14	Everton Football Club	0.6517946
17	Tottenham Hotspur	0.6220038
23	Liverpool FC	0.5799794
459	England football team	0.5277520
18	Swansea City Football Club	0.4647856

[1] "Manchester United"  
[5] "Bastian Schweinsteiger"  
[9] "Marouane Fellaini"

"Adnan Januzaj"  
"David De Gea"  
"Manchester United Foundation"

"wayne Rooney"  
"Luke shaw"

"Juan Mata"  
"Daley Blind"

[1] "Manchester United"  
[5] "David De Gea"  
[9] "Marouane Fellaini"

"wayne Rooney"  
"Luke Shaw"  
"Manchester United Foundation"

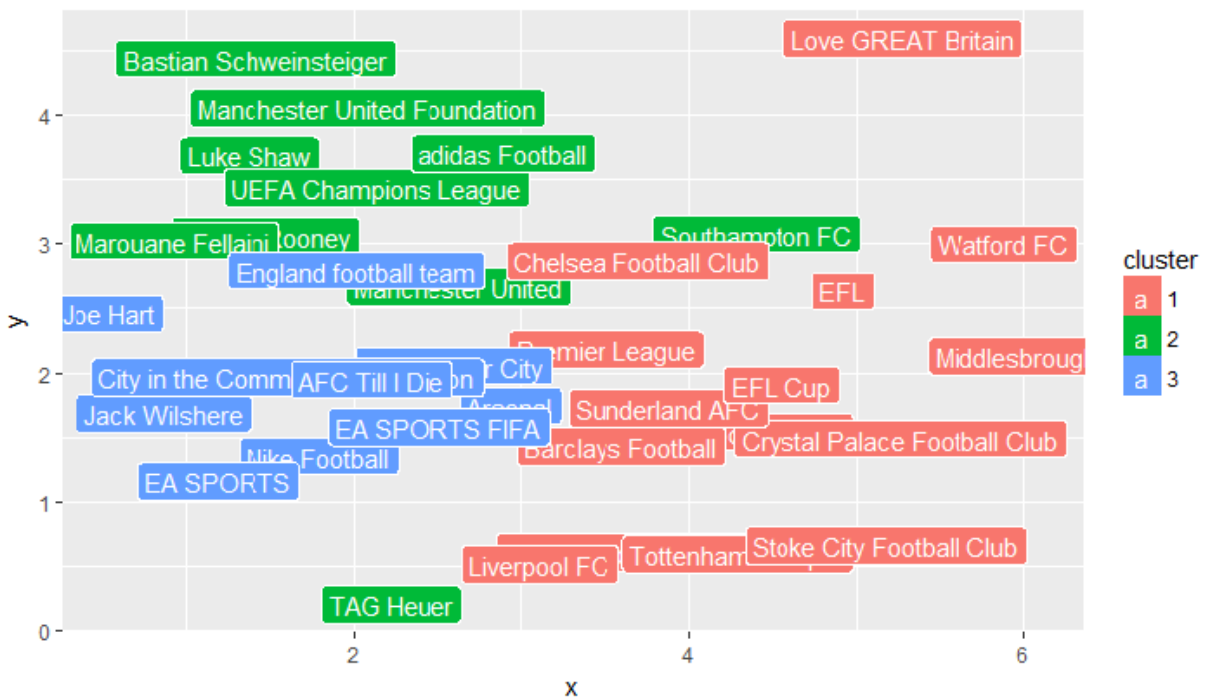
"Juan Mata"  
"Daley Blind"

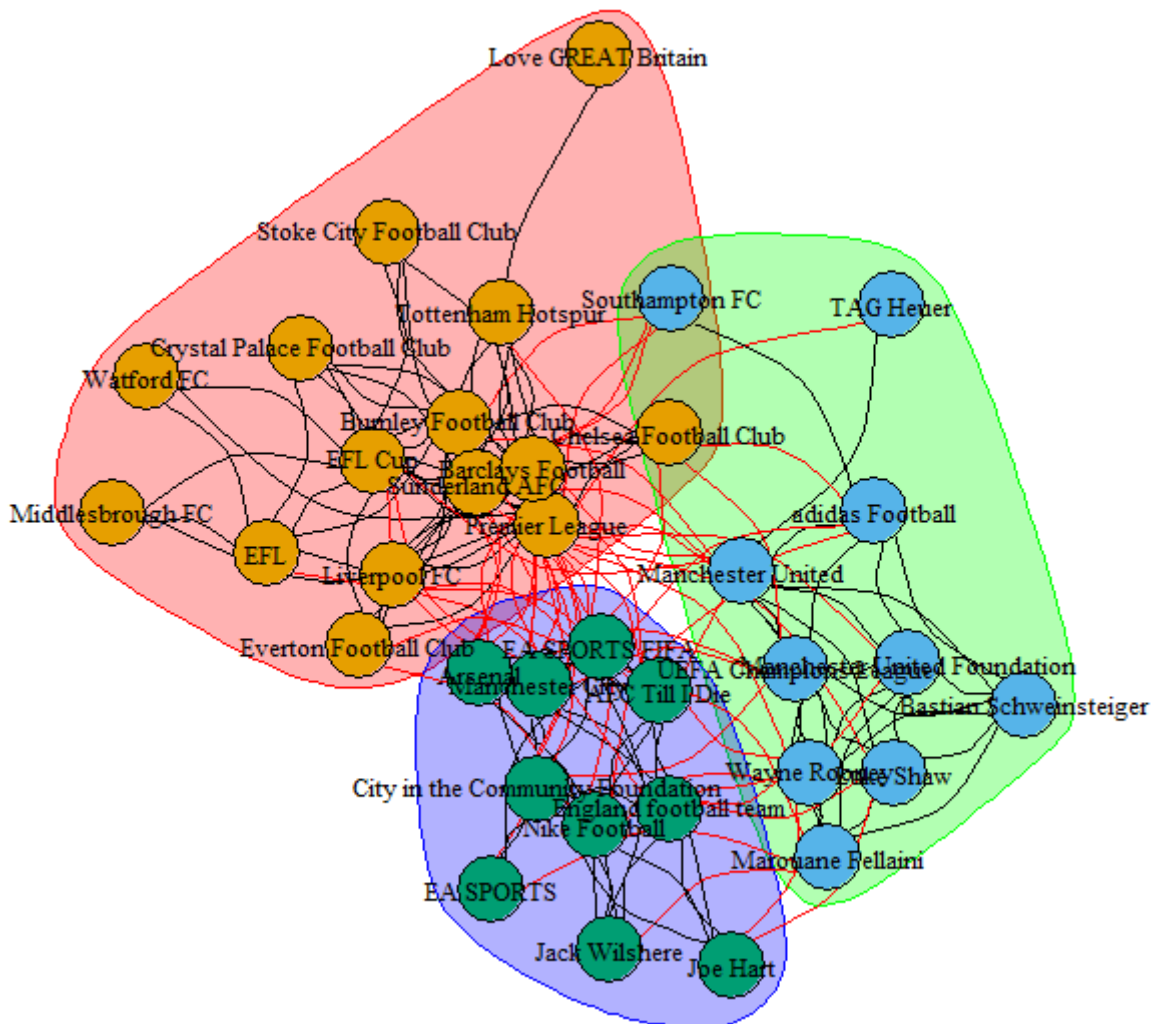
"Bastian Schweinsteiger"  
"Chevrolet FC"

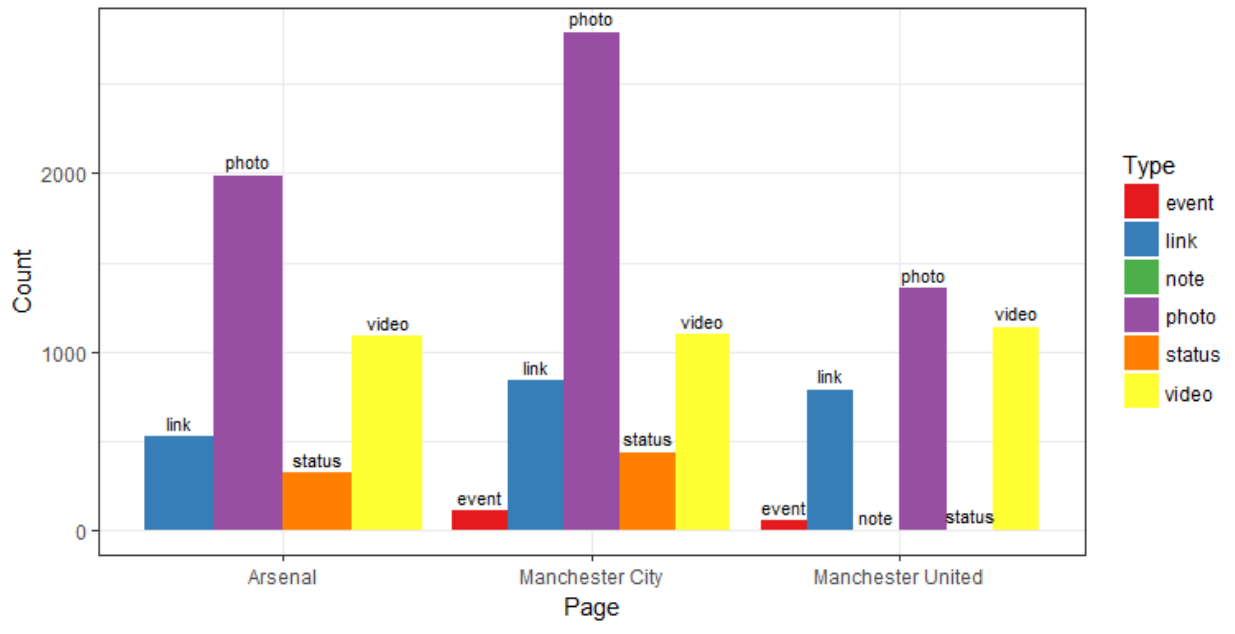
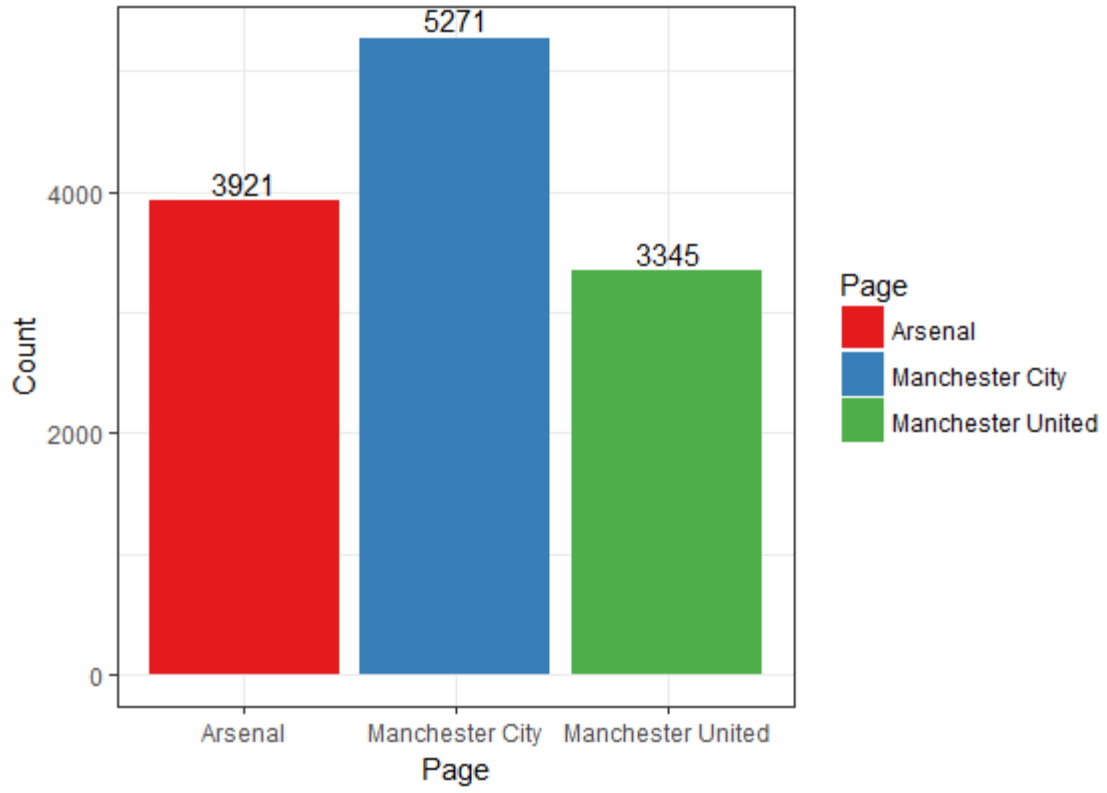
Premier League, Middlesbrough FC, Burnley Football Club, Watford FC  
 Crystal Palace Football Club, Love GREAT Britain, Everton Football Club, Tottenham Hotspur  
 Sunderland AFC, Stoke City Football Club, Liverpool FC, Chelsea Football Club  
 Barclays Football, EFL, EFL Cup

TAG Heuer, Southampton FC, Manchester United, Wayne Rooney  
 Bastian Schweinsteiger, Luke Shaw, Marouane Fellaini, Manchester United Foundation  
 UEFA Champions League, adidas Football

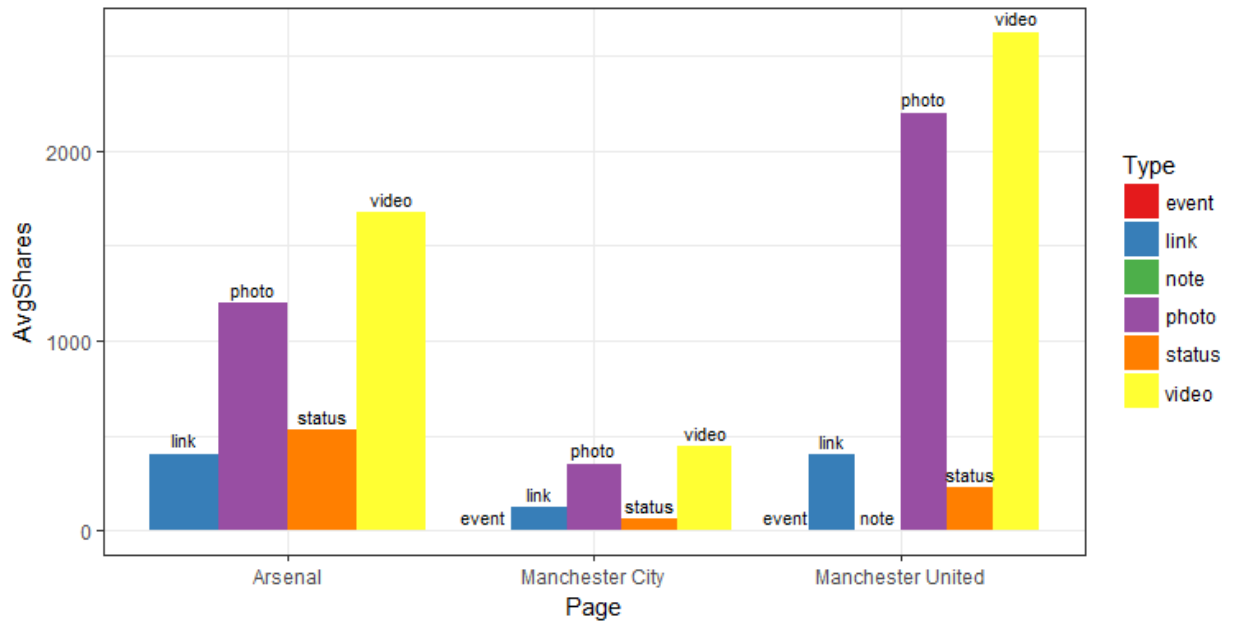
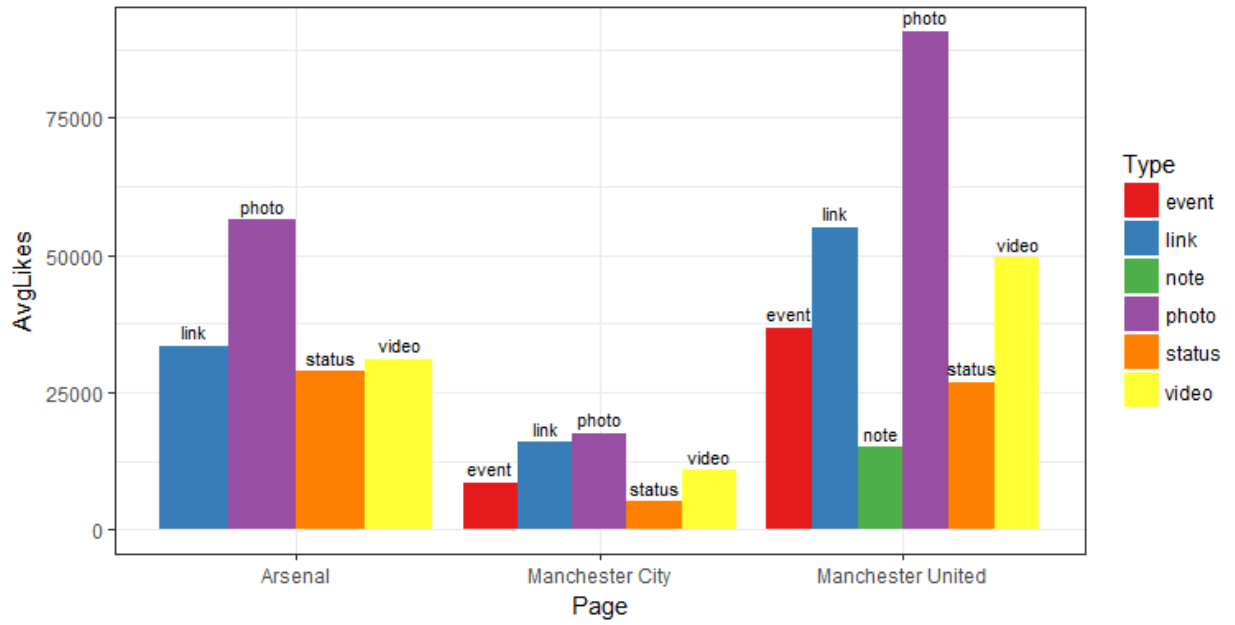
Nike Football, Manchester City, Arsenal, EA SPORTS  
 EA SPORTS FIFA, Jack Wilshere, Joe Hart, City in the Community Foundation  
 England football team, AFC Till I Die



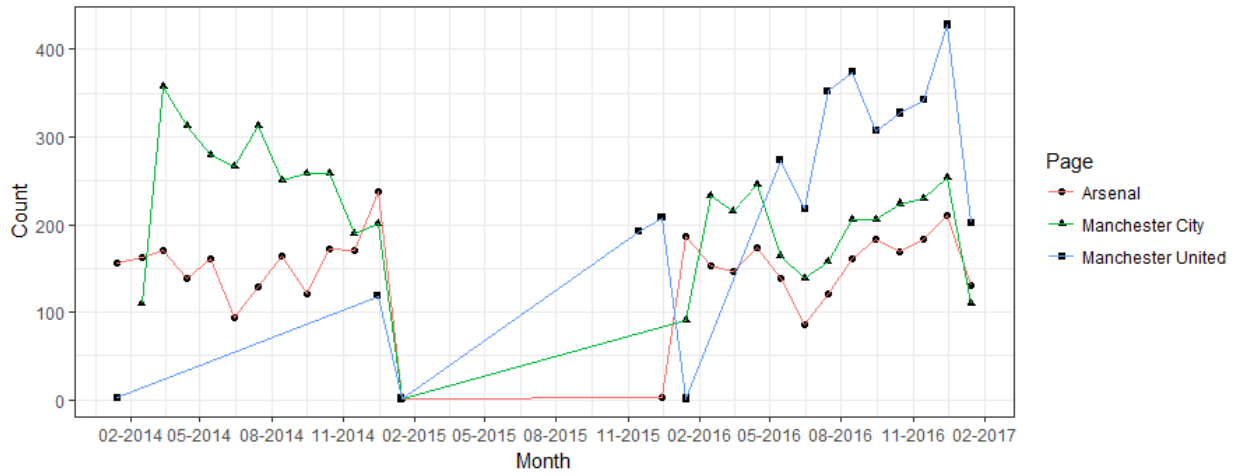




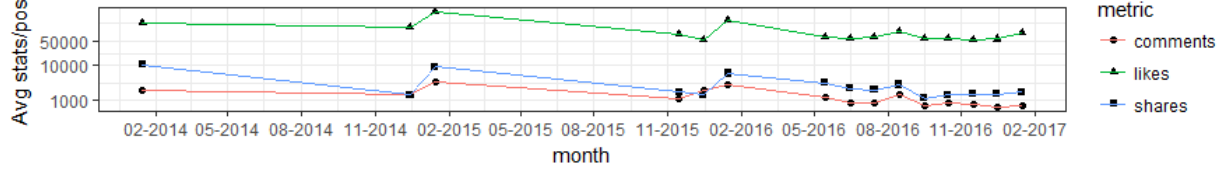




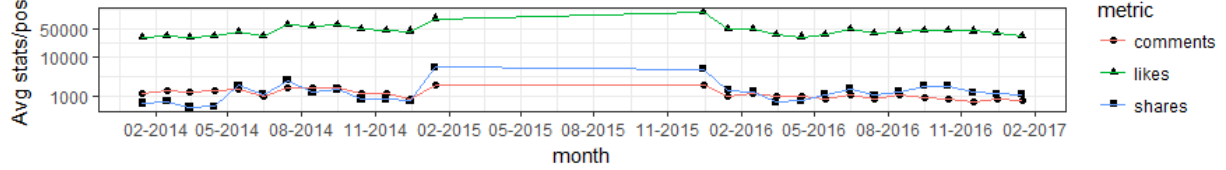
Page Engagement over time



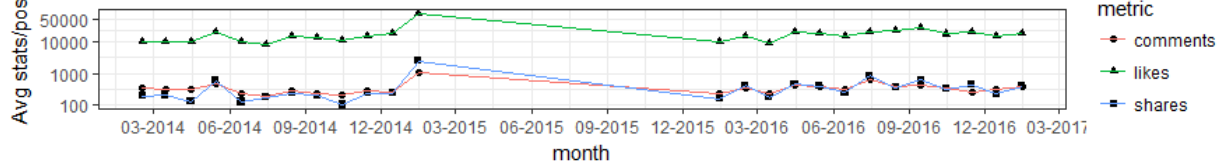
Manchester United



Arsenal



Manchester City



	Page	year	month	type	likes_count	comments_count	shares_count	message
1	Manchester United	2017	2017-01	photo	366400	2504	9381	Two Premier League awards in December! <ed> <U+00A...
2	Manchester United	2016	2016-12	photo	656353	6601	29237	Congratulations to Cristiano Ronaldo... Ballon d'Or win...
3	Manchester United	2015	2015-12	photo	801468	21413	34063	Happy birthday, Sir Alex!
4	Manchester United	2014	2014-12	photo	601320	16598	13978	Happy birthday, Sir Alex Ferguson! We hope you have a ...
5	Manchester City	2017	2017-01	photo	85490	515	1659	<ed> <U+00A0> <U+00BD> <ed> <U+00B2> <U+0099>
6	Manchester City	2016	2016-07	video	300005	17245	76050	When Pep Guardiola stunned City fan Braydon Bent! <e...
7	Manchester City	2015	2015-01	photo	74606	1047	2443	Wishing all City fans a very happy New Year! Here's to a ...
8	Manchester City	2014	2014-06	photo	228690	7189	5088	Feliz cumpleaños Sergio! Join us in wishing Sergio Ague...
9	Arsenal	2017	2017-01	photo	169899	2772	11838	That's what we <U+2764> <U+FE0F> <U+FE0F> to see! ...
10	Arsenal	2016	2016-06	photo	354423	3317	13556	Rest in peace, Champ.
11	Arsenal	2015	2015-12	photo	143412	871	2283	NA
12	Arsenal	2014	2014-07	status	399954	15927	42095	Alexis Sanchez in his new PUMA #Arsenal training kit! #...

	Page	year	month	type	likes_count	comments_count	shares_count	message
1	Manchester United	2017	2017-01	video	262038	3247	14986	On this day in 2008 - <U+26BD> <U+FE0F> <U+26BD> ...
2	Manchester United	2016	2016-05	photo	327285	17059	137536	We are delighted to announce Jose Mourinho is our ne...
3	Manchester United	2015	2015-12	photo	801468	21413	34063	Happy birthday, Sir Alex!
4	Manchester United	2014	2014-01	photo	269723	3191	20394	Happy New Year, from everyone at Manchester United.
5	Manchester City	2017	2017-01	photo	79888	10518	7020	FT   Everton 4-0 City Ugh.
6	Manchester City	2016	2016-07	video	300005	17245	76050	When Pep Guardiola stunned City fan Braydon Bent! <e...
7	Manchester City	2015	2015-01	photo	74606	1047	2443	Wishing all City fans a very happy New Year! Here's to a ...
8	Manchester City	2014	2014-07	photo	27941	2659	29643	SHARE TO WIN: Share this photo and you could be one ...
9	Arsenal	2017	2017-01	video	76750	4663	27510	This is amazing... watch Arsenal and Dunking Devils war...
10	Arsenal	2016	2016-01	video	263978	11998	48981	No Per? No problem - Theo finds a fan for his celebrator...
11	Arsenal	2015	2015-12	photo	131529	3063	7484	Happy New Year to Arsenal fans around the world!
12	Arsenal	2014	2014-05	photo	266363	8825	44301	NA

	from_name	likes_count	message
1	Vu Nguy<U+1EC5>n Thanh Tu<U+1EA5>n	4153	Happy birthday to the greatest of all time !!!
4	Đ<U+1ED6> KIM PHÚC	1103	Happy birthday Sir Alex <3
3	Ariwa Michael Odinakachukwu	485	happy birthday sir come back...we need you
2	Okweni Nelson Ogheneovo	476	Happy birthday grt man that man united even miss
8	Yappey Calo	244	Happy birthday Maax Mohamed . The biggest fan of Ma...
3466	Vaishnavi Desai	147	happy birthday sir Alex....u r the best n ull alwz be...man...
5	Ernie Mcracken	88	Happy birthday sir Alex Miss you so much Not a day goe...
7	Matt Gill	88	Happy birthday Sir Alex, a legend for Manchester United...
6	Pankaj Singh	84	On your Birthday, Sir Alex, I am going to present my smal...
196	Lenq Nesh	41	Happy Birthday To The Legend Sir Alex Ferguson <3 Plea...

	from_name	likes_count	message
2	Alex Peters	1578	Please tell me I wasnt the only one to be constantly chec...
1	Albeiro Molano	1145	grande alexis 100%
5	Promise Kofi Quampah	207	
6	Kim Akim Joachim	176	arsenal is always on my mind
3	Damon Selman-Carrington	172	As a Barcelona fan I am really excited by this move. Sanc...
4	Alex Dougherty	154	"biggest mistake of his life " That's exactly what everyon...
7	Griffin Lee	94	James Blasina omg finally a world class striker
8	Tom Immins	85	Ramsey to Ozil, Ozil to Walcott, Walcott to Sanchez...GO...
9	Iqbal Umar	71	
10	Jack Parkes	34	

$$ND(G) = \frac{|E|}{|V| \times |V| - 1}$$

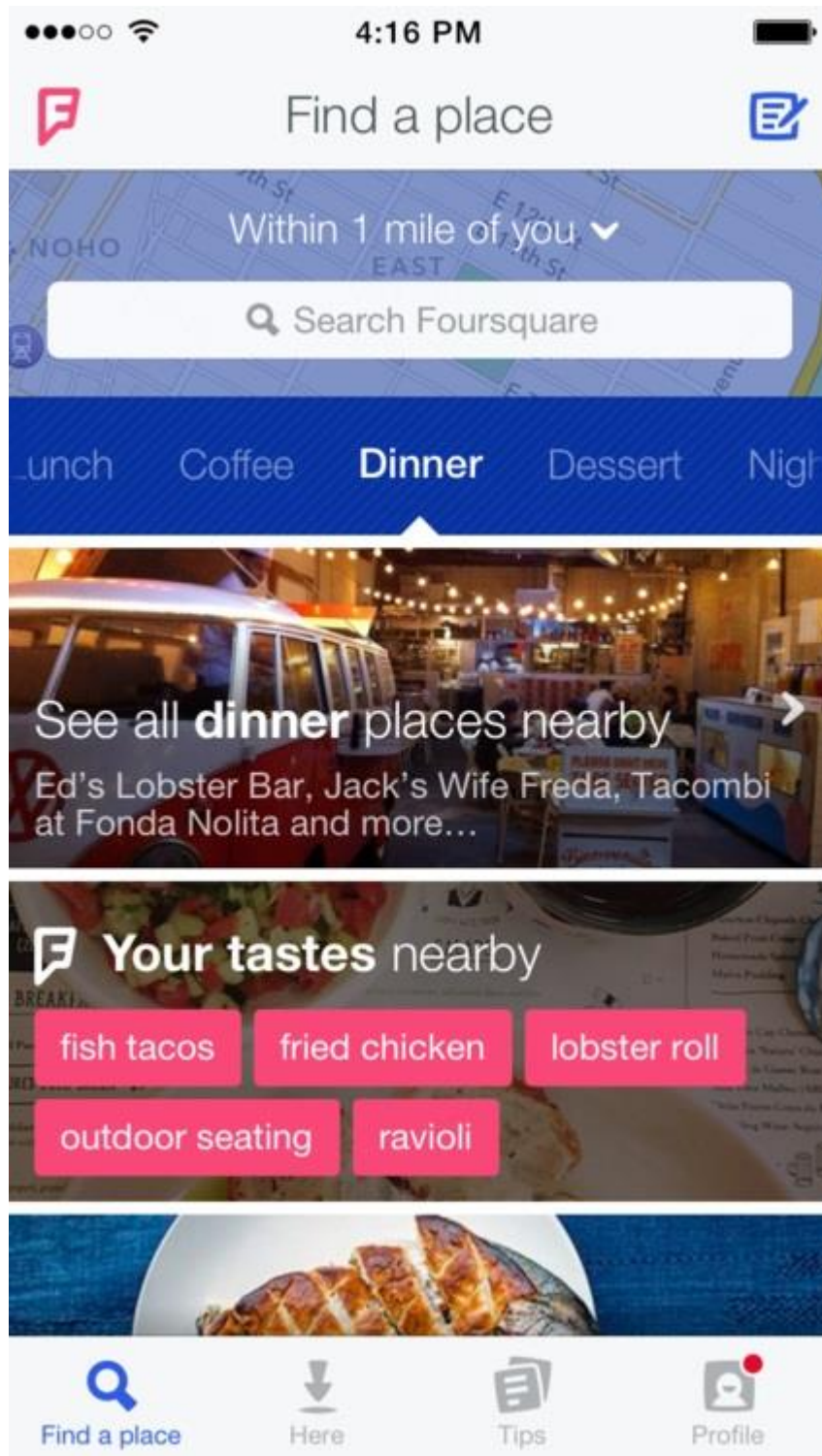
$$Cl(x) = \frac{|V| - 1}{\sum_{i=1}^{|V|} sdist(i, x) \forall (i \neq x)}$$


$$Bw(x) = \sum_{i, j \in V} \frac{nsdist(i, j) x}{nsdist(i, j)}$$

$$PR(p_x) = \frac{1-d}{N} + d \sum_{p_i \in M(p_x)} \frac{PR(p_i)}{L(p_i)}$$

$$p_1, p_2, \dots, p_x, \dots, p_N \quad M(p_x)$$

## Chapter 4: Foursquare – Are You Checked-In Yet?



 Find great places on the go.  
Discover what's nearby, search for what you're craving, and get deals and tips along the way. [Get the app](#)

### New Developer App

Get started integrating Foursquare into your app or website

Foursquare application for Learning Sc

**Web addresses**

Application Url \*

Your privacy policy url

Redirect URI(s)

[Developer Documentation](#)

 Find great places on the go.  
Discover what's nearby, search for what you're craving, and get deals and tips along the way. [Get the app](#)

Application for Learning social media analytics with R [Edit this App](#)

### Chapter 4

**App Information**

CLIENT\_ID

CLIENT\_SECRET

[Test this App](#) [Get Started](#)

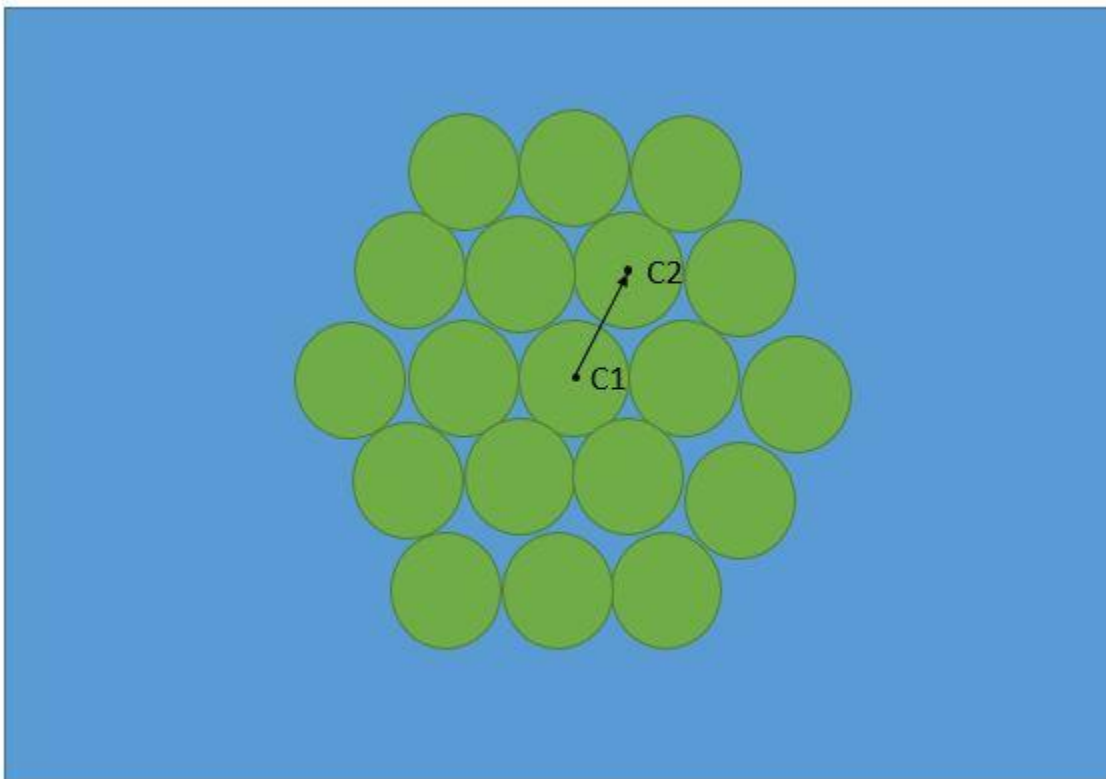
**Administrative information**

Owner

- Apps
- App Details
- Edit App
- Get Started
- FAQ
- Icons and Images
- Reset or Delete App
- App Stats



super_cat_id	super_cat_name	cat_id	cat_name	cat_pluralName	cat_shortName
4d4b7104d754a06370d81259	Arts & Entertainment	56aa371be4b08b9a8d5734db	Amphitheater	Amphitheaters	Amphitheater
4d4b7104d754a06370d81259	Arts & Entertainment	4fceeaa171983d5d06c3e9823	Aquarium	Aquariums	Aquarium
4d4b7104d754a06370d81259	Arts & Entertainment	4bf58dd8d48988d1e1931735	Arcade	Arcades	Arcade
4d4b7104d754a06370d81259	Arts & Entertainment	4bf58dd8d48988d1e2931735	Art Gallery	Art Galleries	Art Gallery
4d4b7104d754a06370d81259	Arts & Entertainment	4bf58dd8d48988d1e4931735	Bowling Alley	Bowling Alleys	Bowling Alley
4d4b7104d754a06370d81259	Arts & Entertainment	4bf58dd8d48988d17c941735	Casino	Casinos	Casino
4d4b7104d754a06370d81259	Arts & Entertainment	52e81612bcbc57f1066b79e7	Circus	Circuses	Circus
4d4b7104d754a06370d81259	Arts & Entertainment	4bf58dd8d48988d18e941735	Comedy Club	Comedy Clubs	Comedy Club
4d4b7104d754a06370d81259	Arts & Entertainment	5032792091d4c4b30a586d5c	Concert Hall	Concert Halls	Concert Hall
4d4b7104d754a06370d81259	Arts & Entertainment	52e81612bcbc57f1066b79ef	Country Dance Club	Country Dance Clubs	Country Dance Club
4d4b7104d754a06370d81259	Arts & Entertainment	52e81612bcbc57f1066b79e8	Disc Golf	Disc Golf Courses	Disc Golf
4d4b7104d754a06370d81259	Arts & Entertainment	56aa371be4b08b9a8d573532	Exhibit	Exhibits	Exhibit
4d4b7104d754a06370d81259	Arts & Entertainment	4bf58dd8d48988d1f1931735	General Entertainment	General Entertainment	Entertainment





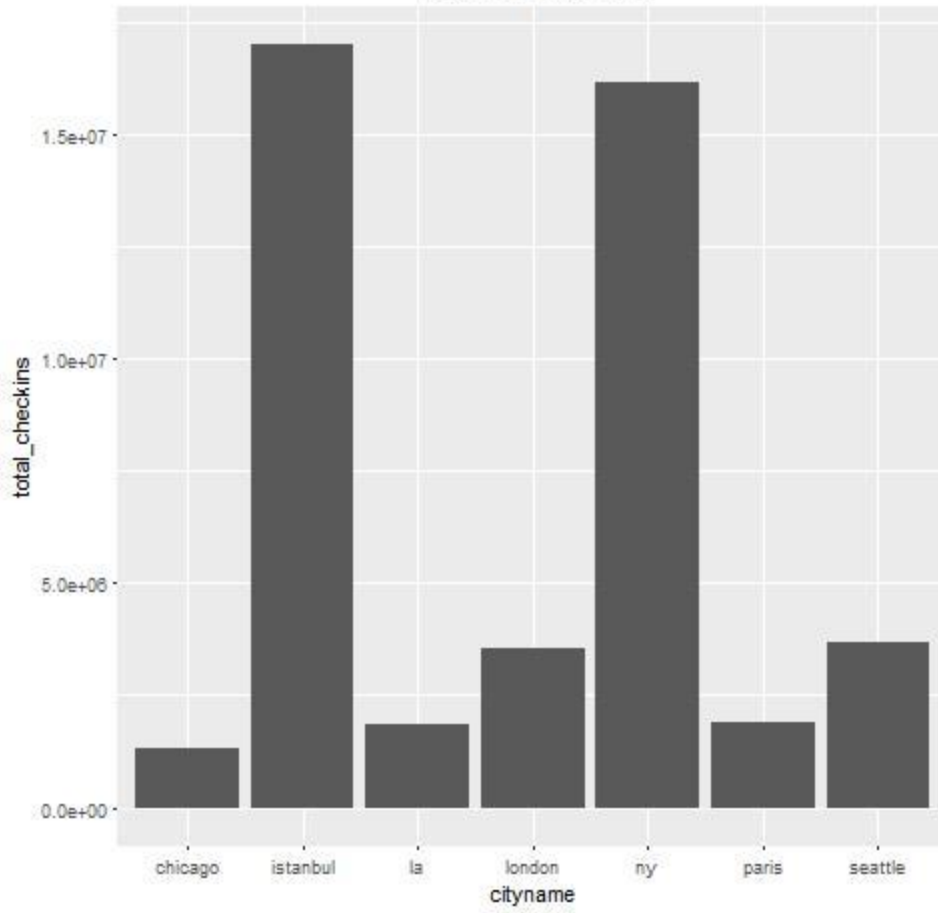
	venue.name	venue.id	venue.stat	venue.usersCount	venue.tipCount	venue.categoryid
3729	Istiklal Caddesi	4b50966af964a520632827e3	3972957	1107739	4774	4bf58dd8d48988d1f9931735
3730	Istiklal Caddesi	4b50966af964a520632827e3	3972957	1107739	4774	4bf58dd8d48988d1f9931735
3731	Istiklal Caddesi	4b50966af964a520632827e3	3972957	1107739	4774	4bf58dd8d48988d1f9931735
3732	Istiklal Caddesi	4b50966af964a520632827e3	3972957	1107739	4774	4bf58dd8d48988d1f9931735
3725	Kapalıçarsi	4c09fd76009a0f476ac2e8bf	1144926	400184	1663	4deefb944765f83613cdba6e
3726	Kapalıçarsi	4c09fd76009a0f476ac2e8bf	1144926	400184	1663	4deefb944765f83613cdba6e
3727	Kapalıçarsi	4c09fd76009a0f476ac2e8bf	1144926	400184	1663	4deefb944765f83613cdba6e
3728	Kapalıçarsi	4c09fd76009a0f476ac2e8bf	1144926	400184	1663	4deefb944765f83613cdba6e
3715	Galata Kulesi	4b732d5bf964a52011a02de3	732496	510733	1885	4deefb944765f83613cdba6e
3716	Galata Kulesi	4b732d5bf964a52011a02de3	732496	510733	1885	4deefb944765f83613cdba6e
3717	Galata Kulesi	4b732d5bf964a52011a02de3	732496	510733	1885	4deefb944765f83613cdba6e
3718	Galata Kulesi	4b732d5bf964a52011a02de3	732496	510733	1885	4deefb944765f83613cdba6e
3719	Galata Kulesi	4b732d5bf964a52011a02de3	732496	510733	1885	4deefb944765f83613cdba6e

```
> head(all_city_data_with_category)
```

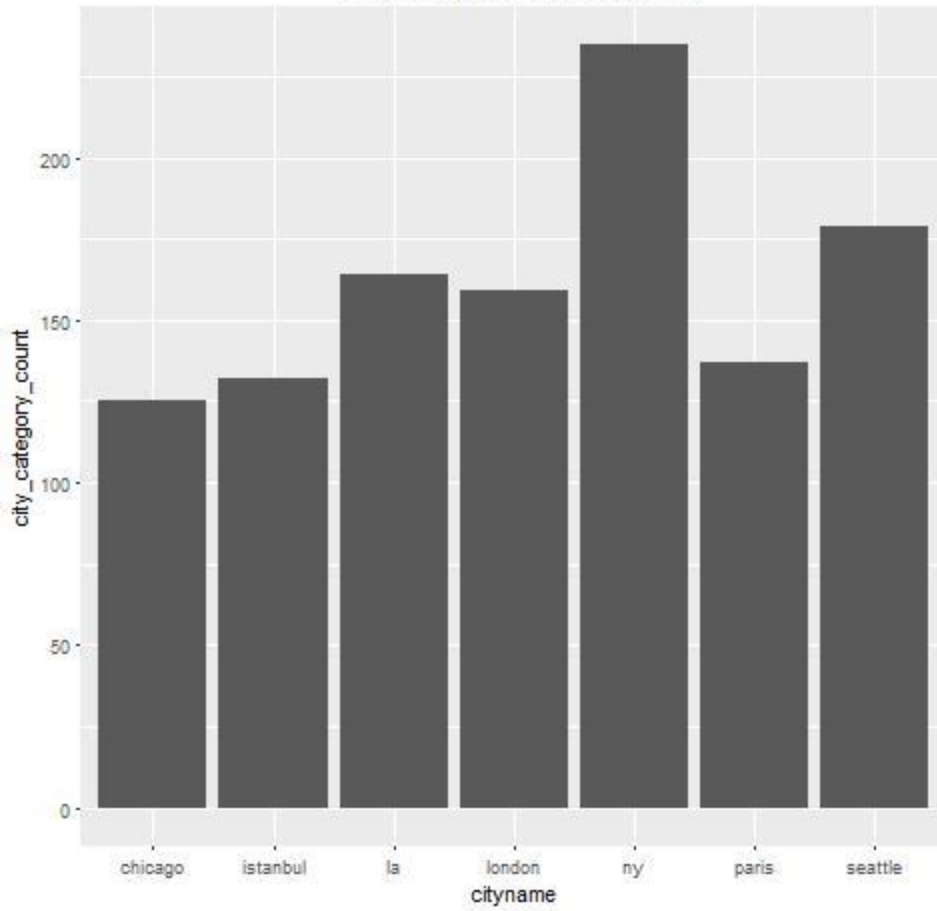
```

      venue.name      venue.id venue.stats venue.usersCount
1      Pasanella & Sons 4b61d830f964a52088262ae3      816      527
2      Noodle Village ç*¥é°µè»' 49d3deadf964a5201d5c1fe3      6160      3113
3      Smorgasbar @ Seaport Smorgasburg 51a0e3c2498e8382f6b3a3bf      6838      4911
4      South Street Seaport Museum 4ab67030f964a520187720e3      1606      1157
5      Dumplings 4ae775c8f964a52087ab21e3      247      128
6      Bocadillo 577a8f47498ebddf91b56bbd      164      92
      venue.tipCount      venue.categoryid      super_cat_id      super_cat_name
1      24 4bf58dd8d48988d119951735 4d4b7105d754a06378d81259      Shop & Service
2      103 4bf58dd8d48988d145941735 4d4b7105d754a06374d81259      Food
3      66 4bf58dd8d48988d117941735 4d4b7105d754a06376d81259      Nightlife Spot
4      14 4bf58dd8d48988d190941735 4d4b7104d754a06370d81259      Arts & Entertainment
5      5 4bf58dd8d48988d145941735 4d4b7105d754a06374d81259      Food
6      6 4bf58dd8d48988d1db931735 4d4b7105d754a06374d81259      Food
      cat_name      cat_pluralName      cat_shortName      cityname
1      Food & Drink Shop      Food & Drink Shops      Food & Drink      ny
2      Asian Restaurant      Asian Restaurants      Asian      ny
3      Bar      Bars      Bar      ny
4      Museum      Museums      Museum      ny
5      Asian Restaurant      Asian Restaurants      Asian      ny
6      Spanish Restaurant      Spanish Restaurants      Spanish      ny
> |
```

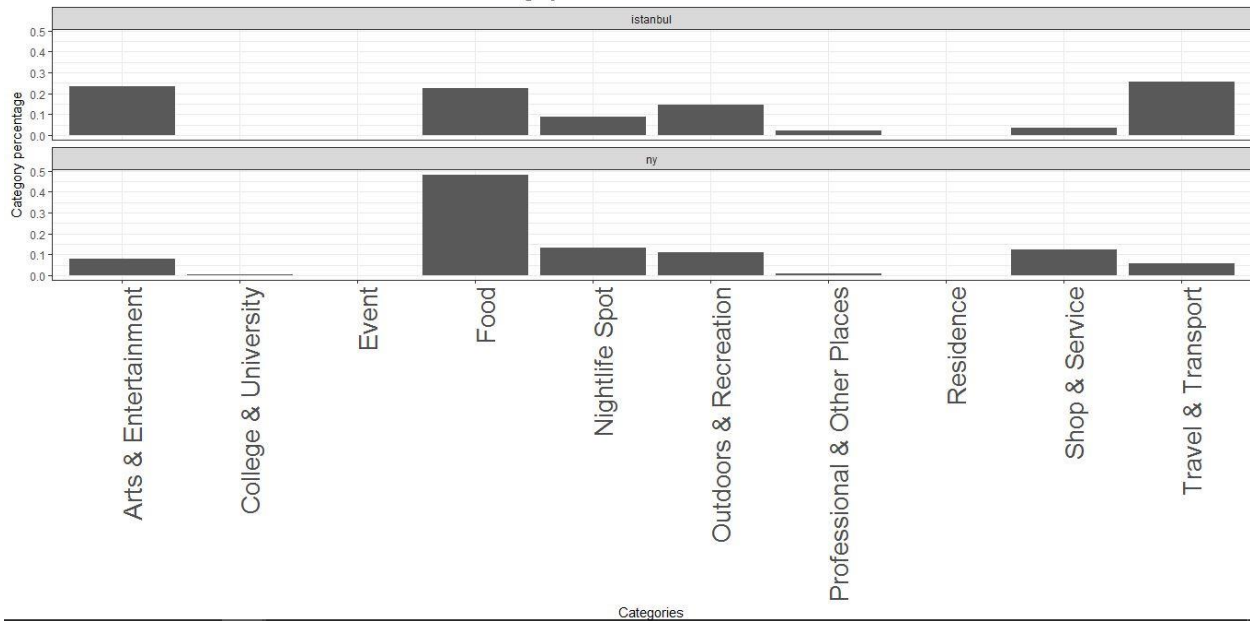
City wise check-ins

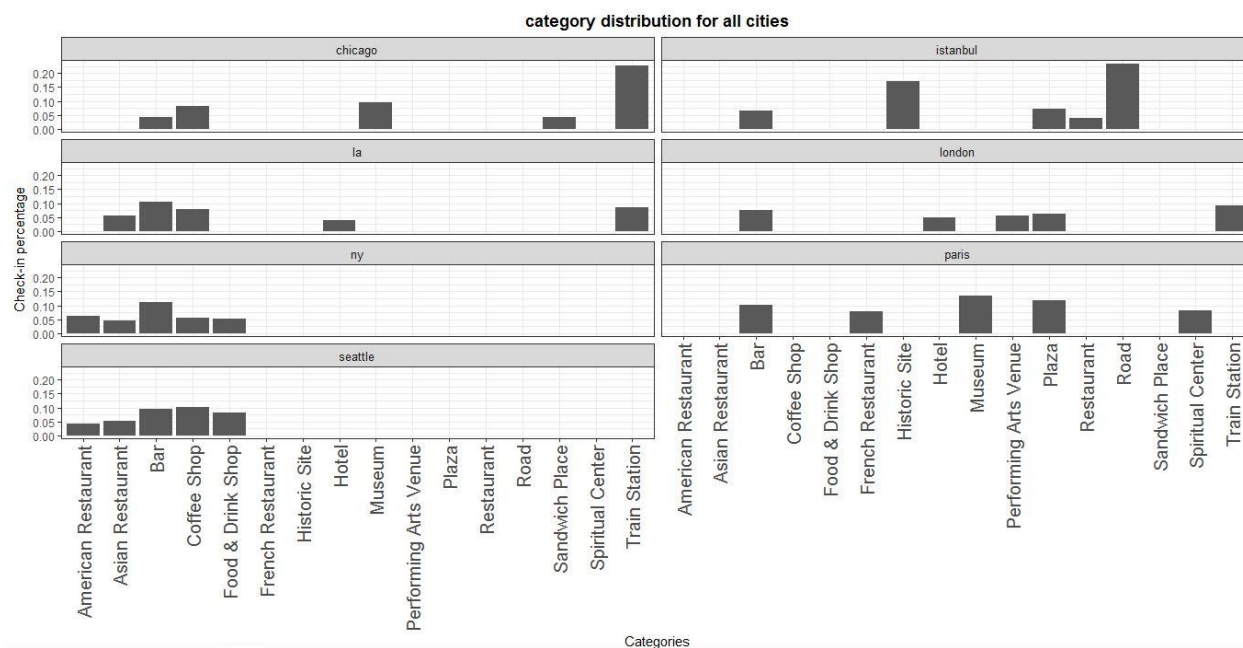


Total categories for each city



category distribution for NY and Istanbul





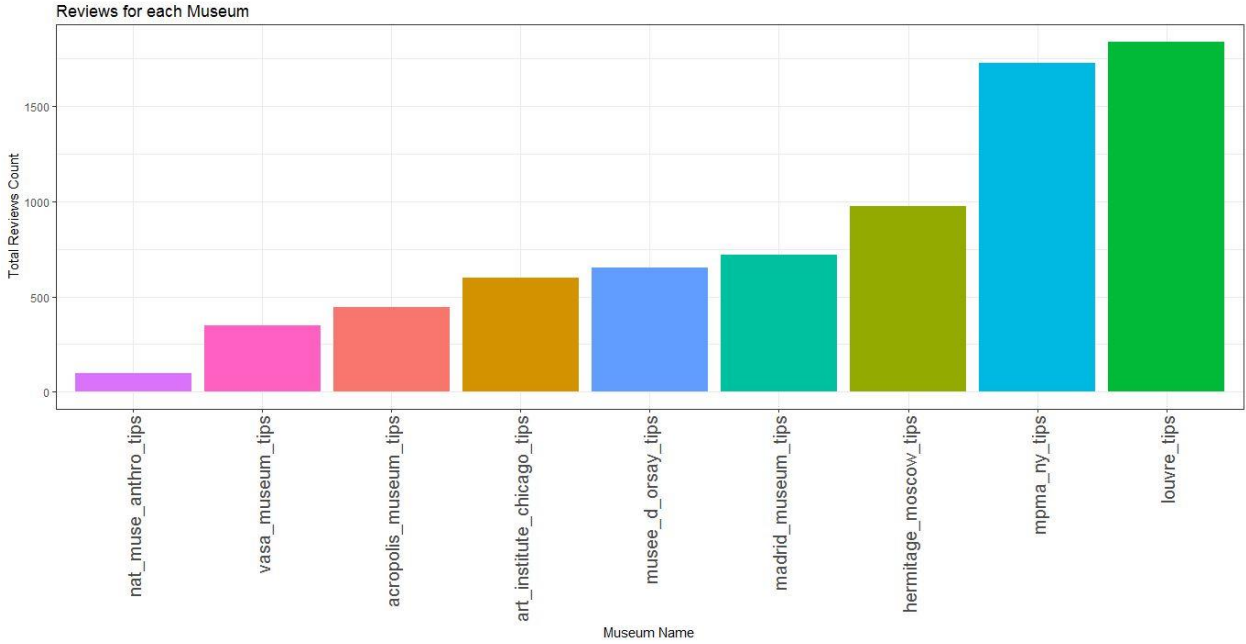
	cityname	venue.stats.Asian Restaurant	venue.stats.Spanish Restaurant	venue.stats.Dessert Shop	venue.stats.Caribbean Restaurant	venue.stats.Mexican Restaurant
2	ny	0.0183	0.0005	0.0102	0.0023	0.0990
3800	istanbul	0.0267	0.0000	0.0010	0.0002	0.0000
4767	paris	0.0082	0.0732	0.0097	0.0000	0.0173
6356	la	0.0670	0.0000	0.0005	0.0051	0.0226
7378	seattle	0.0130	0.0202	0.0169	0.0652	0.0009
8775	london	0.0205	0.0352	0.0025	0.0246	0.0719
10080	chicago	0.0015	0.0000	0.0003	0.0477	0.0053

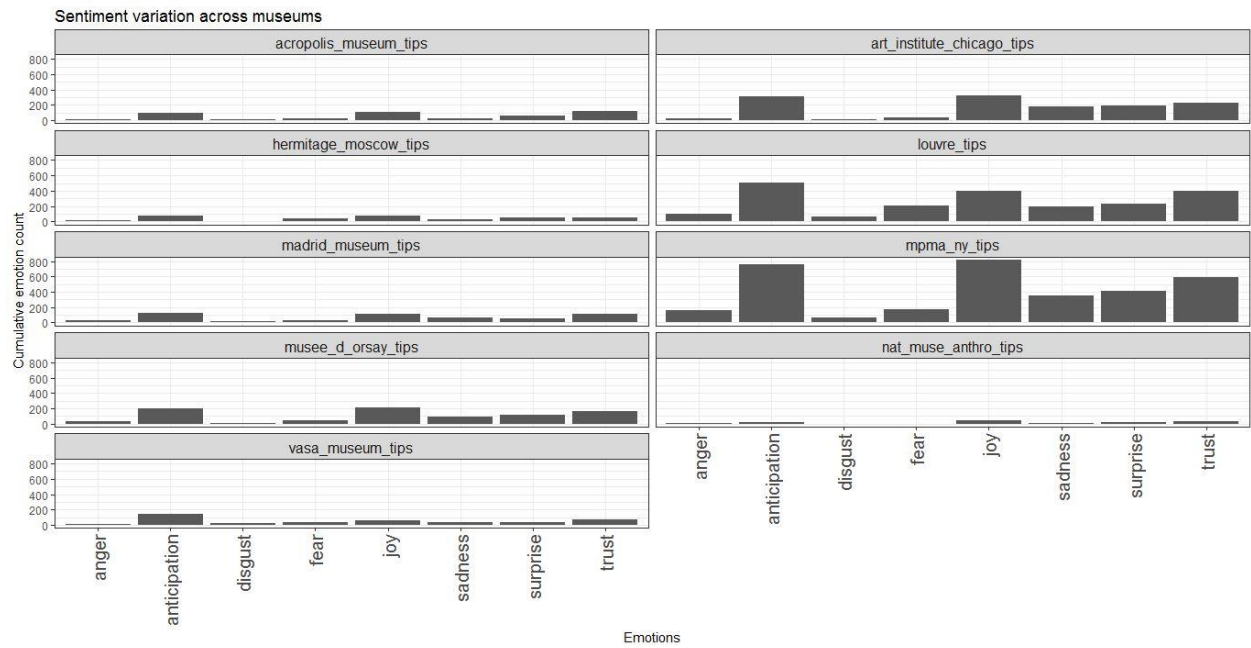
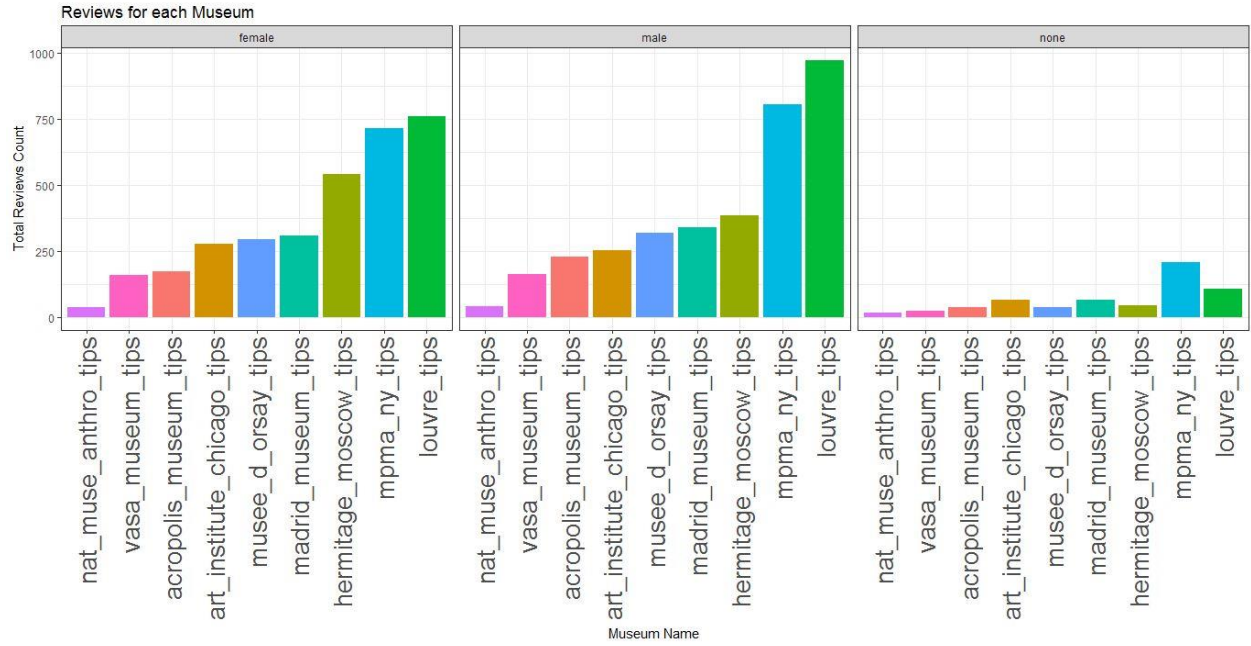
cityname	restaurant_type	rating
5	1	4
2	1	5
6	1	4
3	1	5
7	1	4
4	1	4
1	1	1
5	2	2
2	2	NA

predicted_ratings.pred_rating	restaurant_type_name	city_name
3.922040	venue.stats.Swiss Restaurant	ny
3.746480	venue.stats.Irish Pub	ny
3.670470	venue.stats.Australian Restaurant	ny
3.288700	venue.stats.Austrian Restaurant	ny
3.245940	venue.stats.Fish & Chips Shop	ny
3.213090	venue.stats.American Restaurant	ny
3.150580	venue.stats.Spanish Restaurant	ny
3.147840	venue.stats.Modern European Restaurant	ny
3.138350	venue.stats.Portuguese Restaurant	ny
3.080260	venue.stats.Soup Place	ny

tip_id	tip_text	tip_user_gender
5260e0ab11d2cffe485e9eb5	Join our tour Stockholm Must Sees and skip the line a...	none
51bf73d4498e1757060897fe	*** : Construit en 1628, le Wasa a parcouru 1,5km ava...	male
572873be498e6a3ca2b93c5e	its amazing to see Vasa after 333 years staying unde...	female
56882608498e9a34f506b7fc	Interested in history or (old) technologies? This is th...	none
52167b6f11d27a67a4fa0a1f	One of the best museums I've been to. Excellent exh...	female
5585c23f498e693bc67c63da	Cool and worth the visit. Discount for students. It will...	male
54e0fedb498eed57395379eb	An entire salvaged 17th naval warship housed in the ...	male
57b702be498e840b547ba756	What a great museum <U+2764><U+FE0F> it's all abo...	male
5473023a498e9daa236f177f	The Vasa Ship, soon to be 400 years old, is one of th...	none
560a3c44498e70bb7343b116	I suggest to watch the movie about the salvage and t...	female
57497c89498e56b7a4610227	The museum has several levels so you can see the s...	female
5664ac59498ec523863853ee	A must see! The only place where you'll see a ship fr...	male
56ae709c498e5cc8e3bb99a2	A great museum. There is free English guided tour w...	female

museum_name	trip_advisor_rank
mpma_ny_tips	1
art_institute_chicago_tips	2
hermitage_moscow_tips	3
musee_d_orsay_tips	4
nat_muse_anthro_tips	5
madrid_museum_tips	6
acropolis_museum_tips	7
vasa_museum_tips	8
louvre_tips	9





museum	trip_advisor_rank	overall_sentiment_rank	female_sentiment_rank	male_sentiment_rank	none_sentiment_rank
mpma_ny_tips	1	6	5	6	4
art_institute_chicago_tips	2	2	2	2	1
hermitage_moscow_tips	3	9	9	9	9
musee_d_orsay_tips	4	4	6	3	3
nat_muse_anthro_tips	5	1	1	1	5
madrid_museum_tips	6	8	7	8	8
acropolis_museum_tips	7	3	3	4	2
vasa_museum_tips	8	5	4	5	7
louvre_tips	9	7	8	7	6

venue.id	venue.name	avg_distance_from_last_venue	num_targets
412d2800f964a520df0c1fe3	Central Park	1394.0244	80
49b7ed6df964a52030531fe3	Times Square	474.7327	76
3fd66200f964a520d7f11ee3	Bryant Park	276.5055	49
427c0500f964a52097211fe3	The Metropolitan Museum of Art (Metropolitan Museu...	796.4101	49
49b79f54f964a5202c531fe3	Rockefeller Center	373.2110	41
4b6b5abff964a520fb022ce3	National September 11 Memorial & Museum	690.7747	41
41102700f964a520d60b1fe3	Macy's	395.0770	39
4297b480f964a52062241fe3	American Museum of Natural History	500.0943	39
4b992b04f964a520726635e3	Barclays Center	373.1741	35
447bf8f1f964a520ec331fe3	Apple Fifth Avenue	556.5376	34
4531059cf964a520683b1fe3	Bloomingdale's	251.0266	34



# Chapter 5: Analyzing Software Collaboration Trends I – Social Coding with GitHub



GitHub, Inc. [US] | https://github.com/settings/developers

Bookmarks | notepad

Personal settings

- Profile
- Account
- Emails
- Notifications
- Billing
- SSH and GPG keys
- Security
- Blocked users
- Repositories
- Organizations
- Saved replies
- Authorized applications
- Installed integrations

Developer applications

Register a new application

	<b>datascience</b> Client ID: d...   0 users
	<b>github_miner</b> Client ID: 9...   1 user
	<b>test</b> Client ID: 6...   5 users

ⓘ These are applications you have registered to use the GitHub API.

Developer settings

OAuth applications



Search GitHub

[Pull requests](#) [Issues](#) [Gist](#)

Personal settings

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[Security](#)

[Blocked users](#)

[Repositories](#)

[Organizations](#)

[Saved replies](#)

[Authorized applications](#)

[Installed integrations](#)

## Register a new OAuth application

### Application name

github\_miner

Something users will recognize and trust

### Homepage URL

http://www.example.com

Test app to mine github data

This is displayed to all potential users of your application

### Authorization callback URL

http://localhost:1410

Your application's callback URL. Read our [OAuth documentation](#) for more information.

Register application

Cancel

## github\_miner



dipanjanS owns this application.

Transfer ownership

0 users

Client ID

98[REDACTED]5ac697c

Client Secret

669[REDACTED]d910

Revoke all user tokens

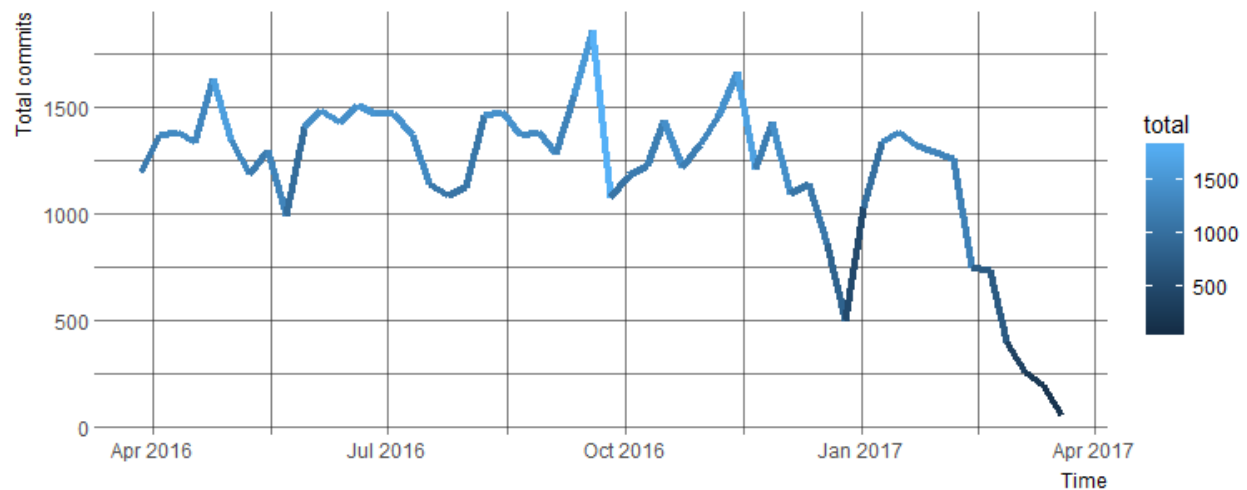
Reset client secret

	login	public_repos	public_gists	followers	created_at	updated_at
1	dipanjanS	62	34	105	2013-02-01T11:52:11Z	2017-02-18T13:38:06Z

	login	public_repos	public_gists	followers	created_at	updated_at
1	dipanjanS	62	34	105	2013-02-01T11:52:11Z	2017-02-18T13:38:06Z

## Weekly GitHub commit frequency

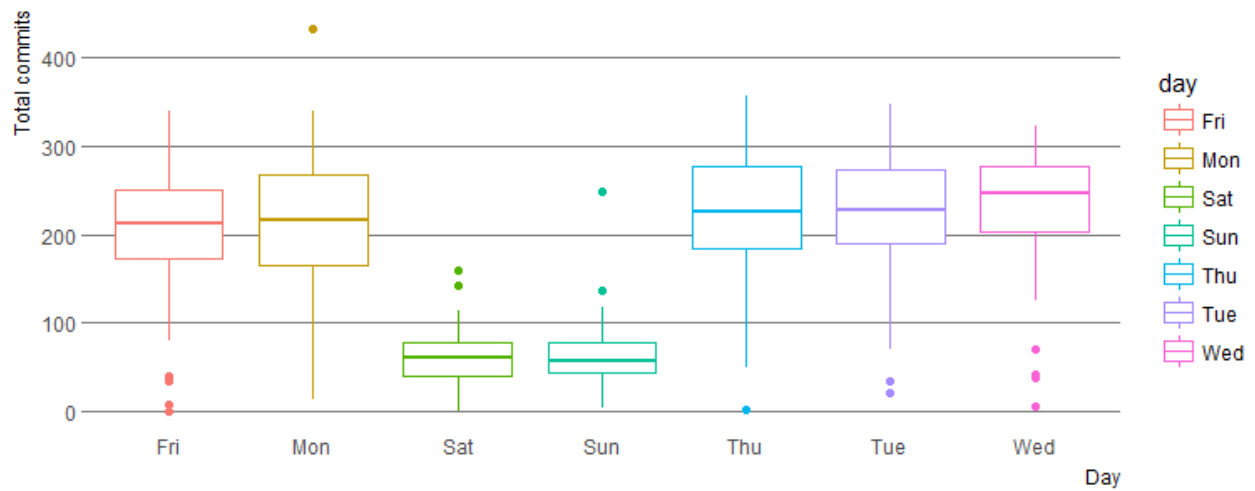
Commit history for the linux repository



	commits	day	time
1	49	Sun	2016-03-27 05:30:00
2	113	Mon	2016-03-28 05:30:00
3	186	Tue	2016-03-29 05:30:00
4	278	Wed	2016-03-30 05:30:00
5	219	Thu	2016-03-31 05:30:00
6	286	Fri	2016-04-01 05:30:00
7	63	Sat	2016-04-02 05:30:00
8	71	Sun	2016-04-03 05:30:00
9	225	Mon	2016-04-04 05:30:00
10	227	Tue	2016-04-05 05:30:00

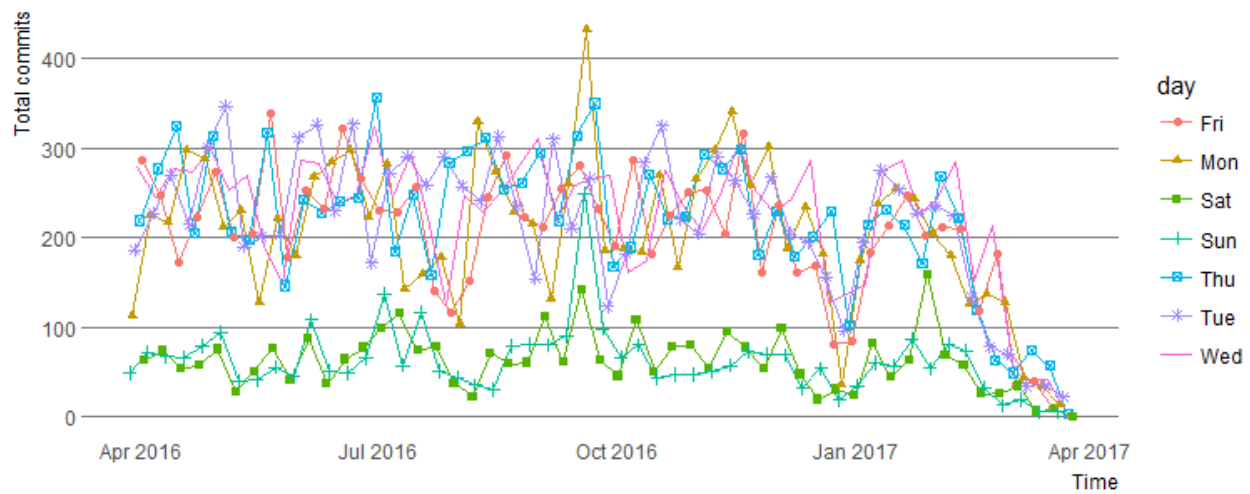
# GitHub commit frequency distribution vs. Day of Week

Commit history for the linux repository



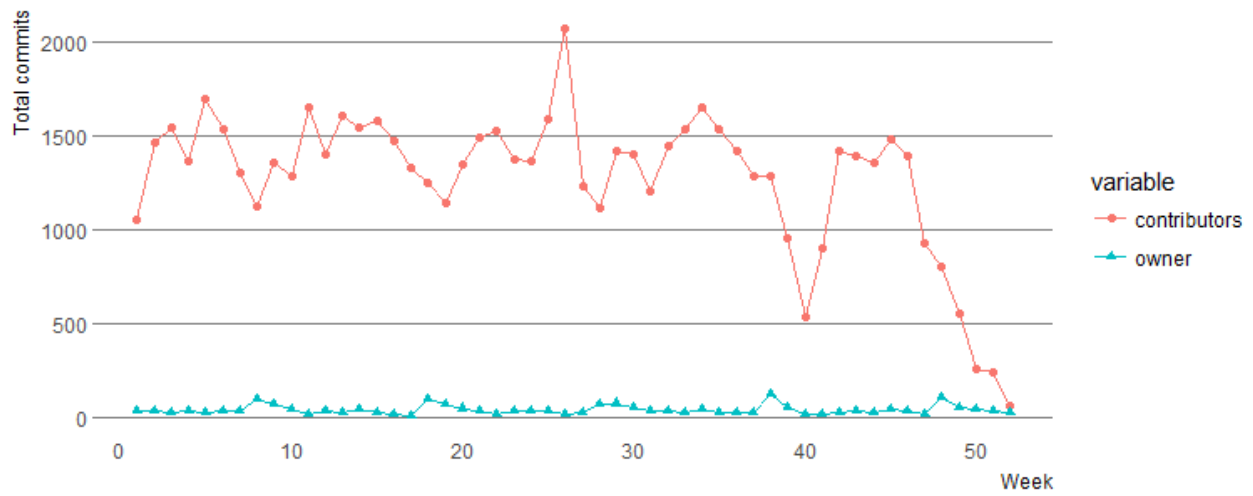
# Daily GitHub commit frequency

Commit history for the linux repository



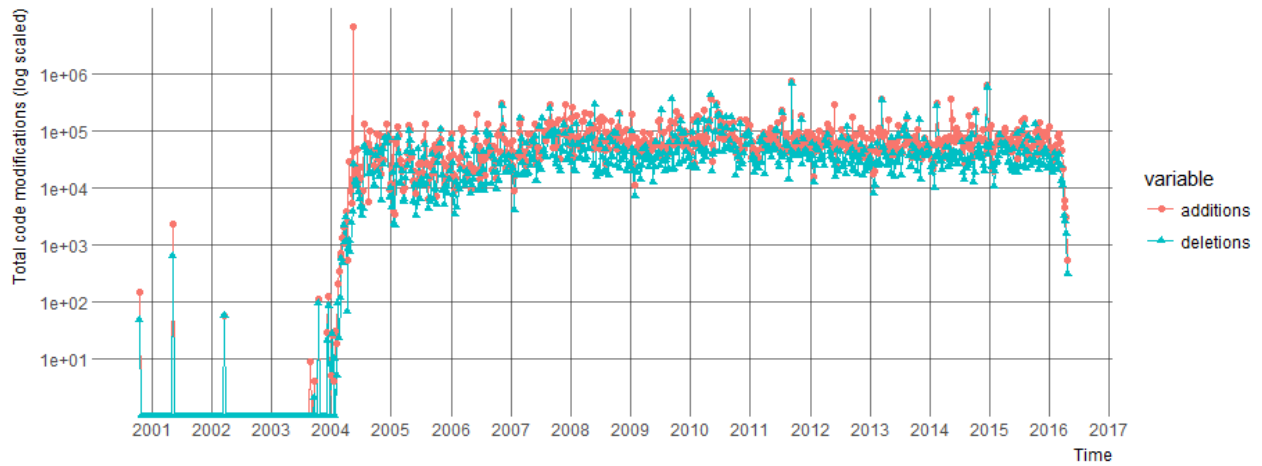
# Weekly GitHub commit frequency comparison

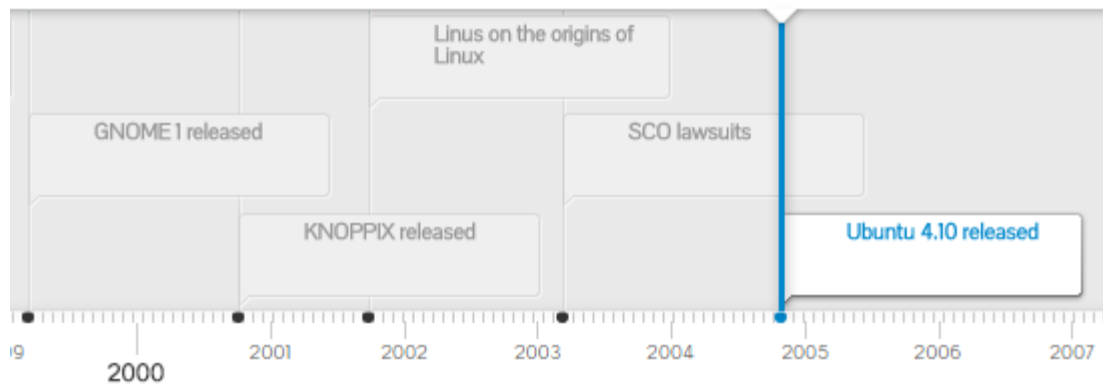
Commit history for the linux repository



# Weekly Github code frequency timeline

Code frequency history for the linux repository

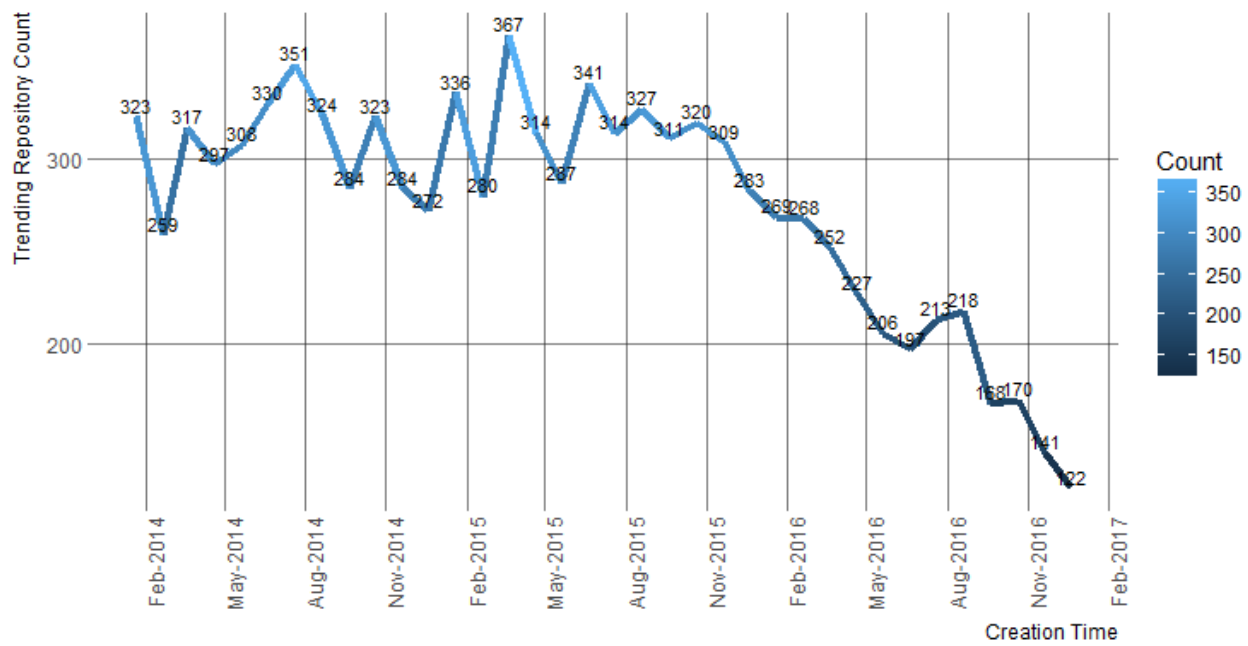




	id	name	full_name	size	fork	stargazers_count	watchers	forks
1	16408992	neovim	neovim/neovim	50964	FALSE	22055	22055	1565
2	15653276	android-open-project	Trinea/android-open-project	1742	FALSE	22005	22005	10968
3	17375436	es6features	lukehoban/es6features	199	FALSE	19288	19288	1742
4	16752620	gogs	gogits/gogs	113009	FALSE	18332	18332	2088
5	18049133	slick	kenwheeler/slick	3444	FALSE	17711	17711	2856
6	18275356	pop	facebook/pop	591	FALSE	17380	17380	2744
7	15585444	Hover	lanLunn/Hover	870	FALSE	16162	16162	3467
8	18280236	gitbook	GitbookIO/gitbook	8356	FALSE	14700	14700	1849
9	16677706	awesome-sysadmin	kahun/awesome-sysadmin	2115	FALSE	14498	14498	2276
10	17165658	spark	apache/spark	270000	FALSE	12169	12169	11450

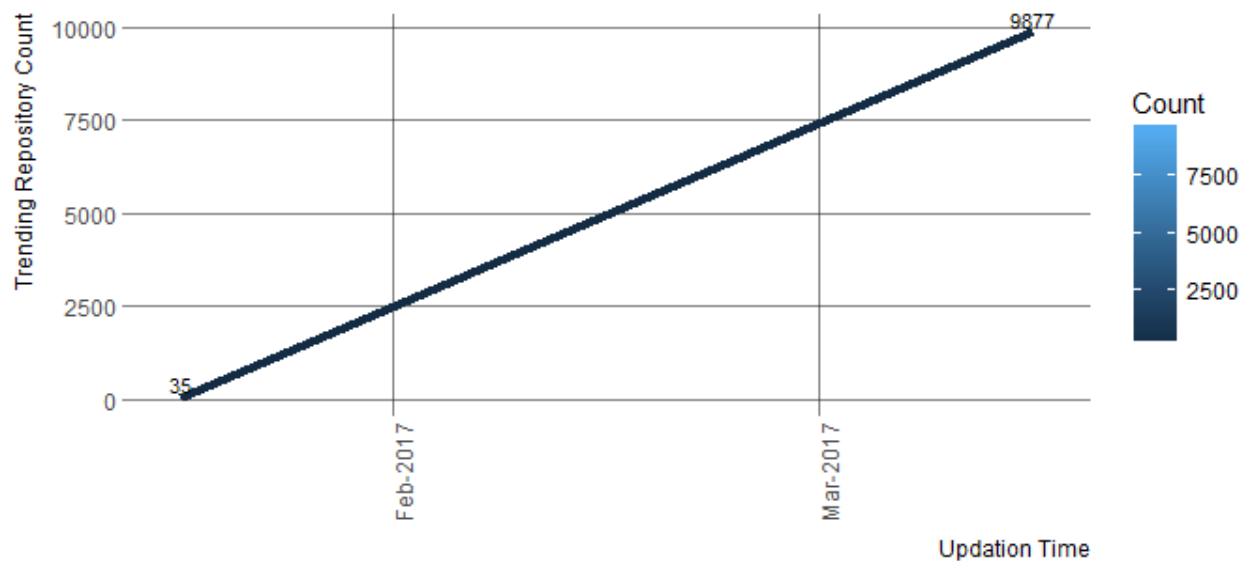
## Trending Repositories vs. Creation Time

Total trending repositories created in GitHub over time



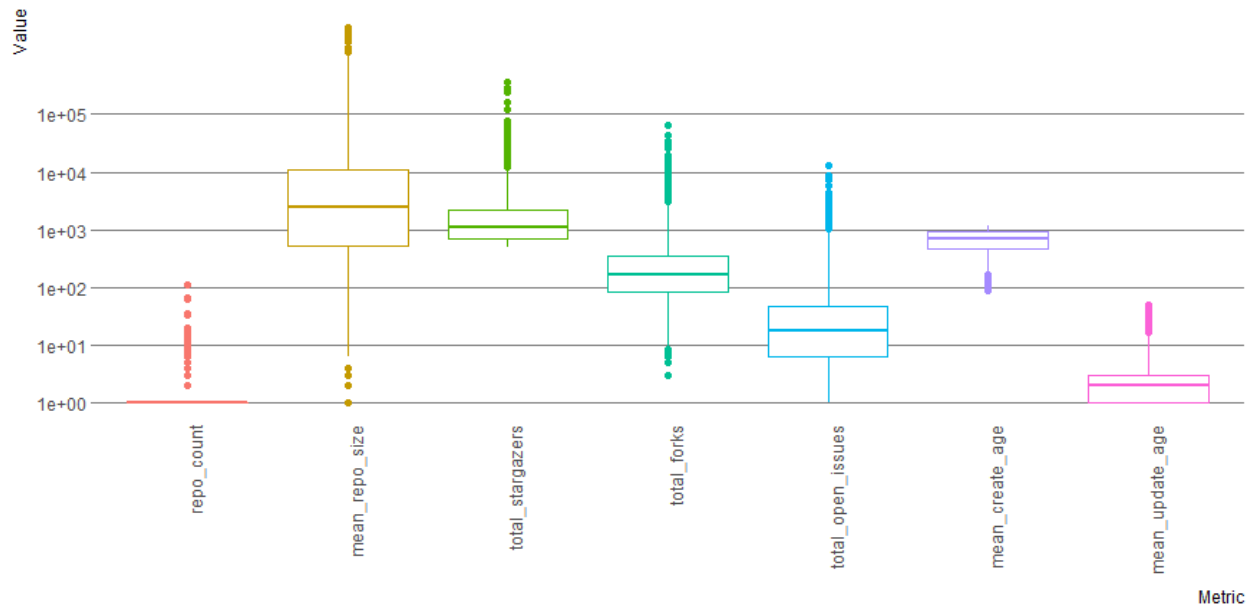
## Trending Repositories vs. Update Time

Total trending repositories last updated in GitHub over time

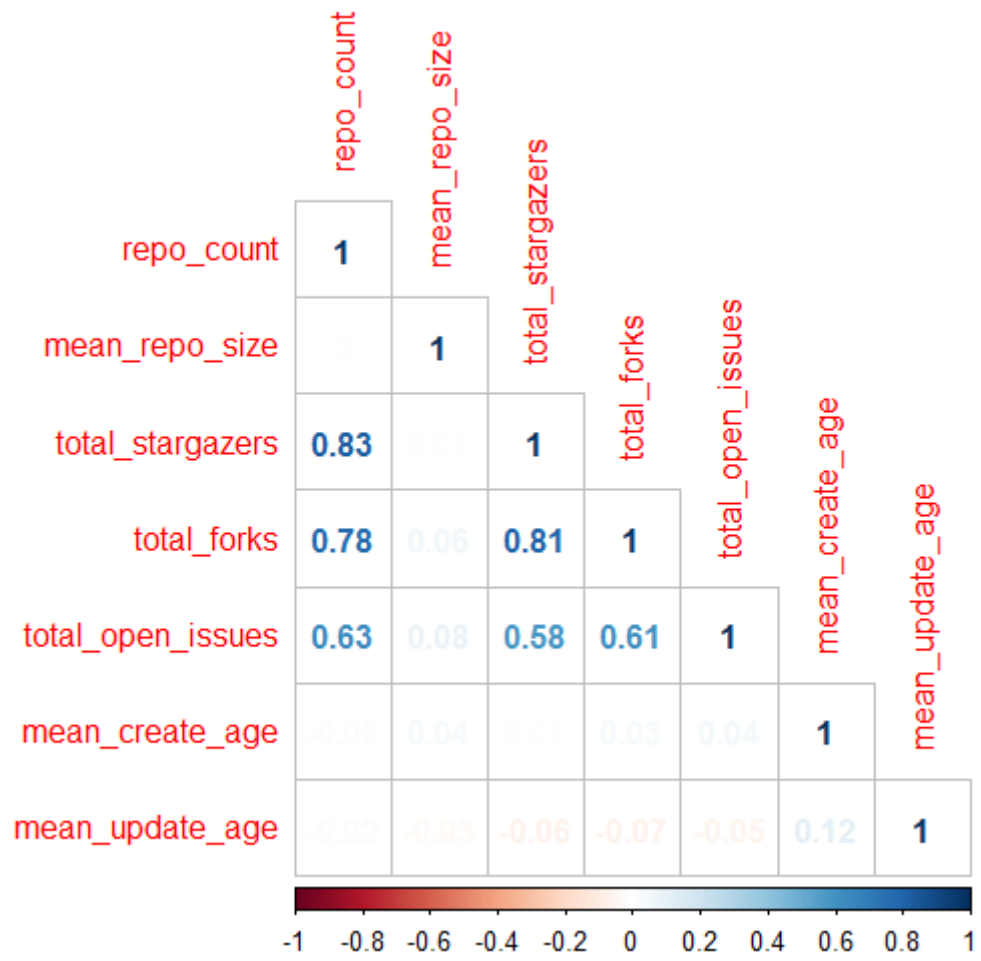


# Comparing GitHub repository metric distributions

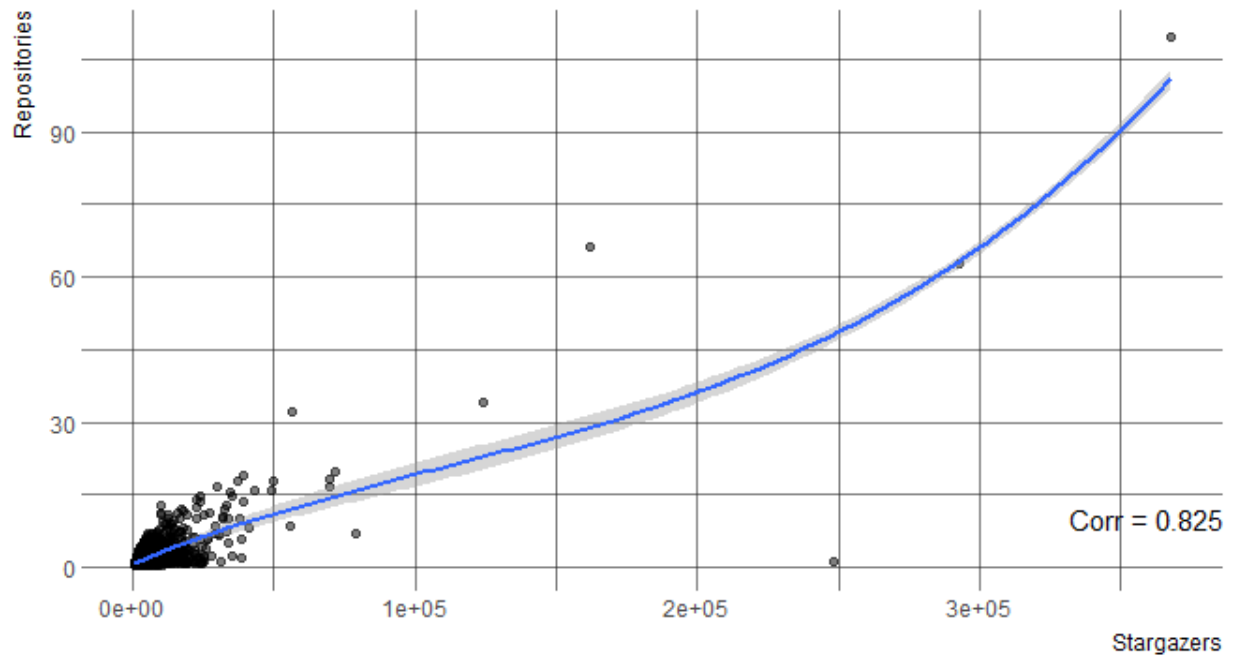
Viewing distributions for various repository metrics



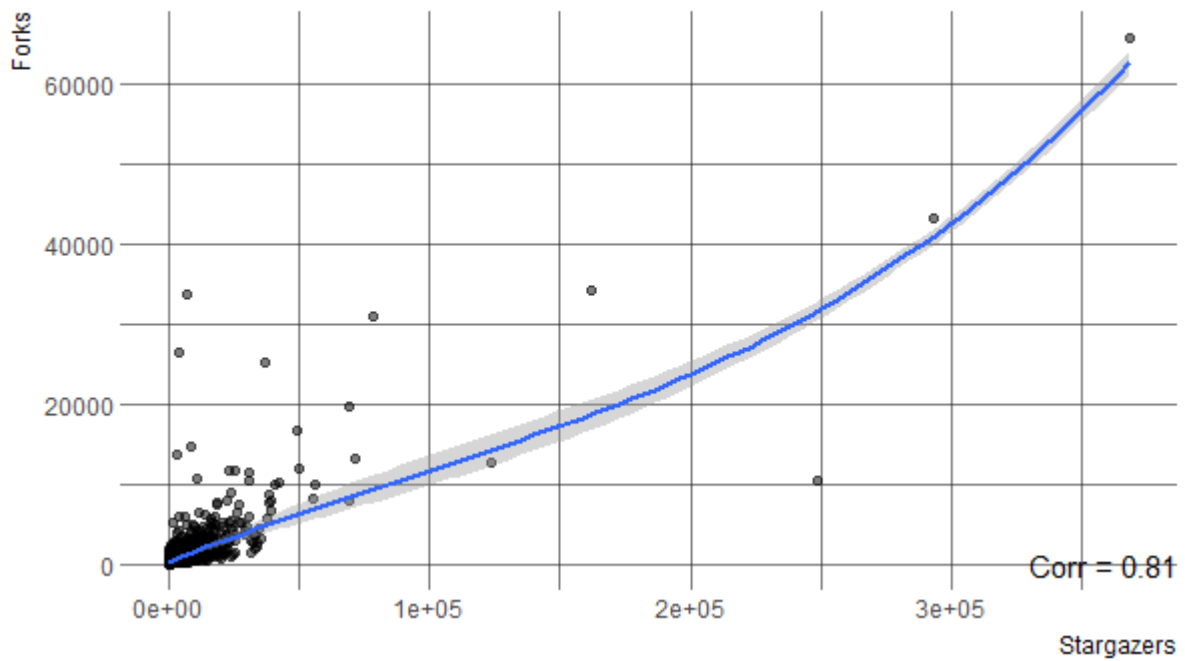




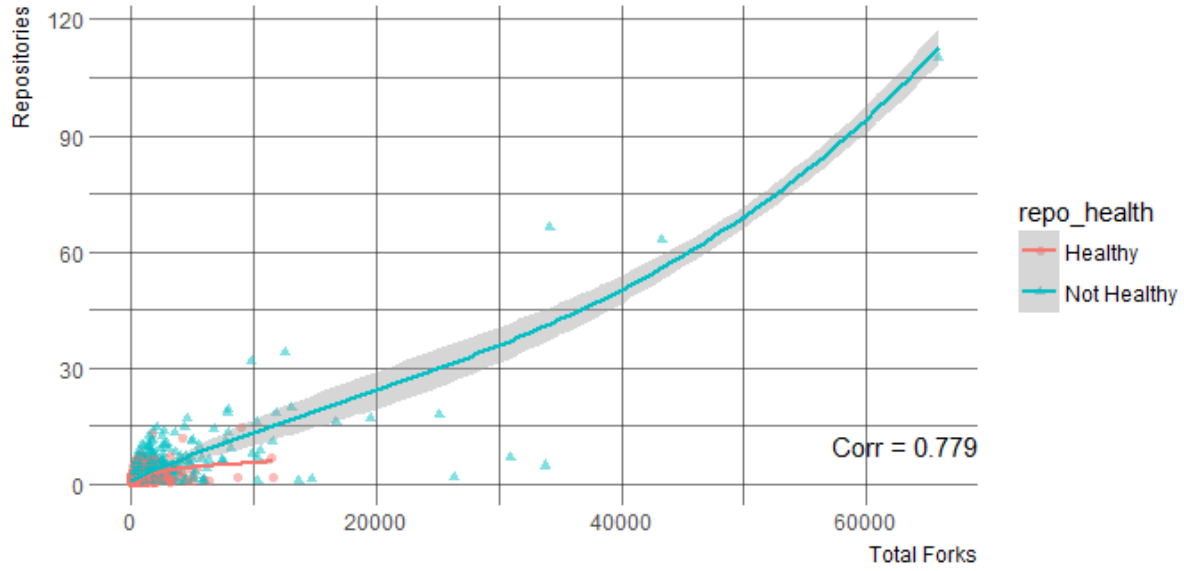
## Correlation between Stargazers & Total Repositories



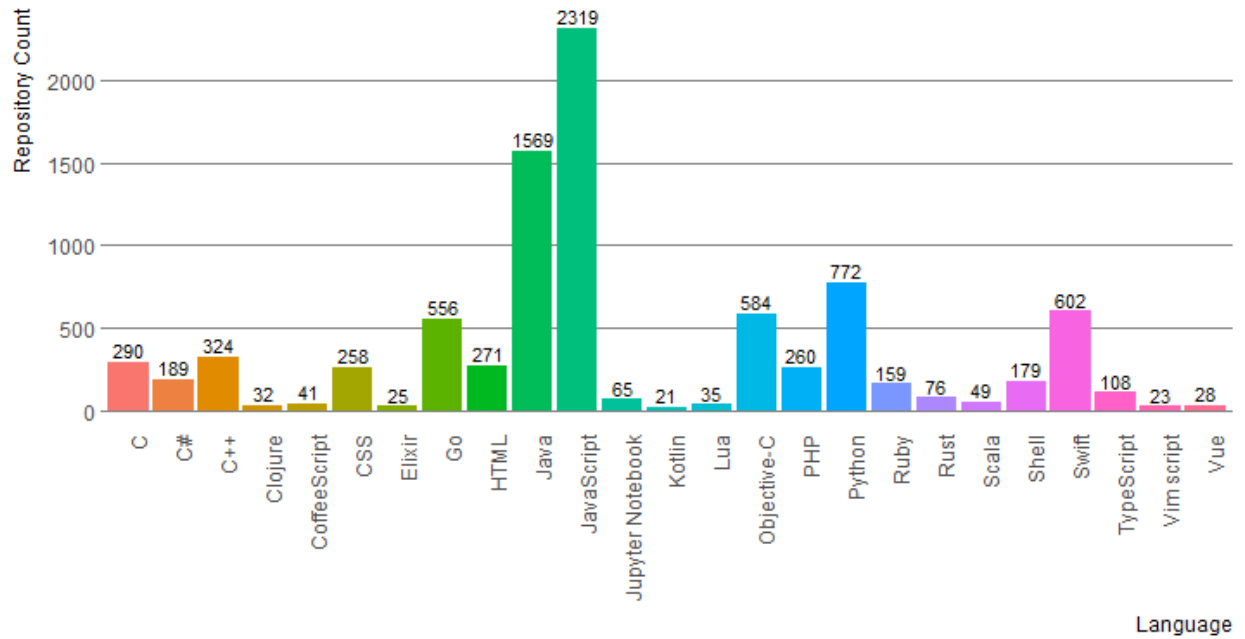
## Correlation between Stargazers & Forks



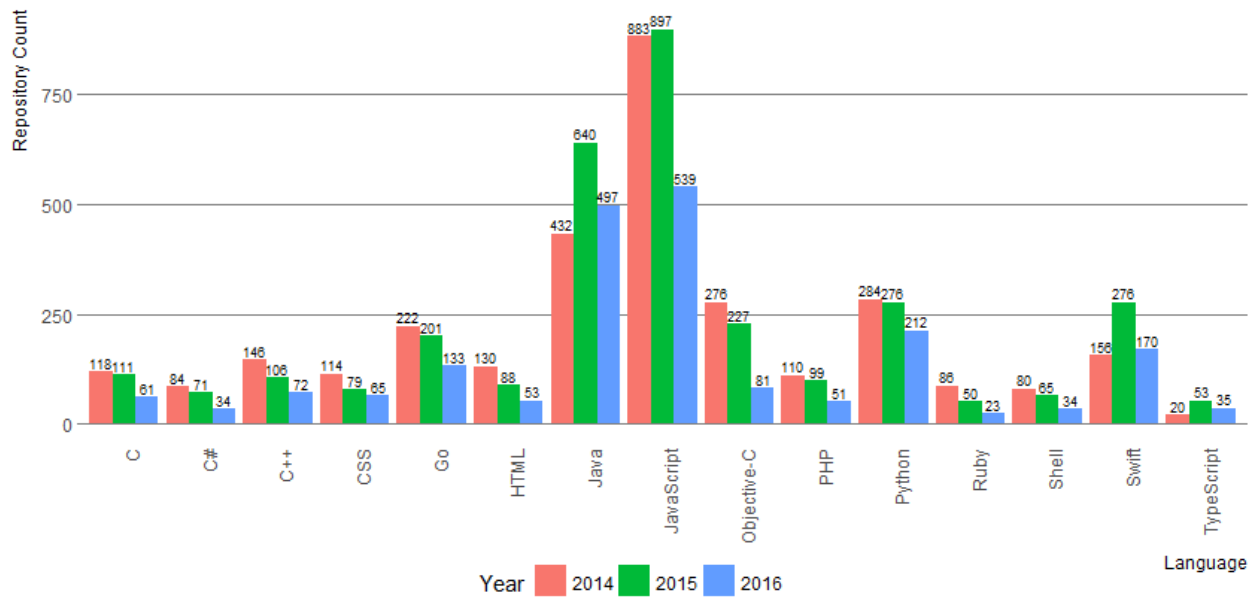
## Relationship between Forks, Total Repositories & Health



## Top Trending Languages in GitHub

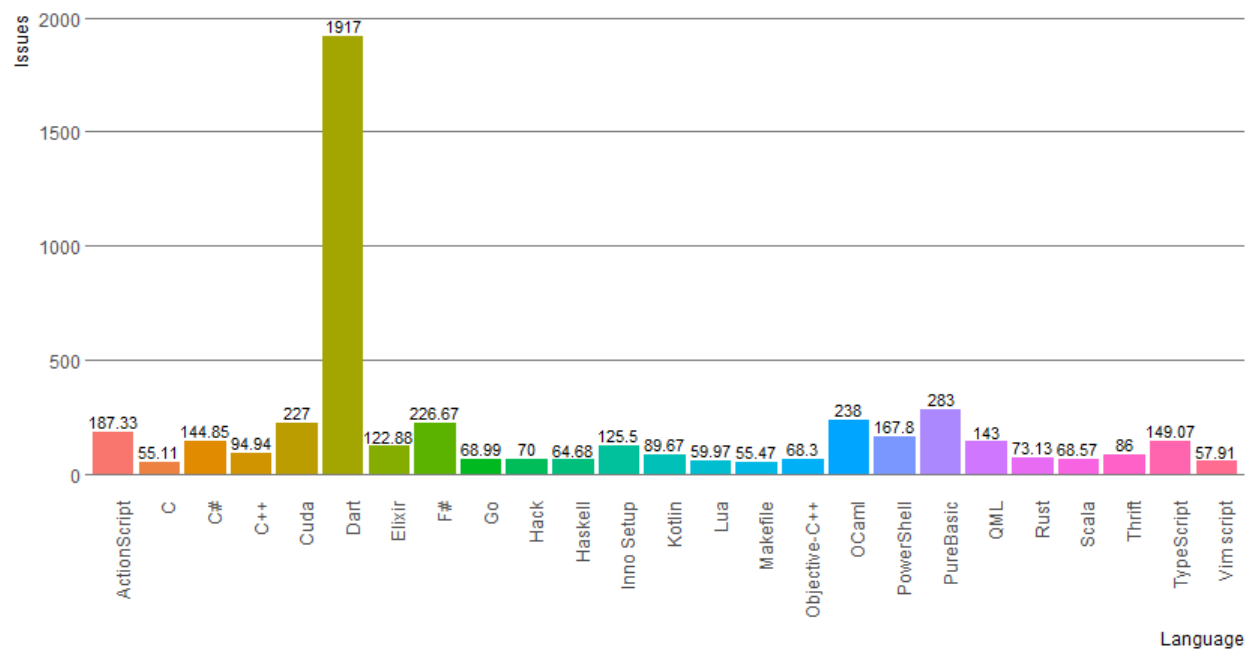


## Trending Languages in GitHub over time



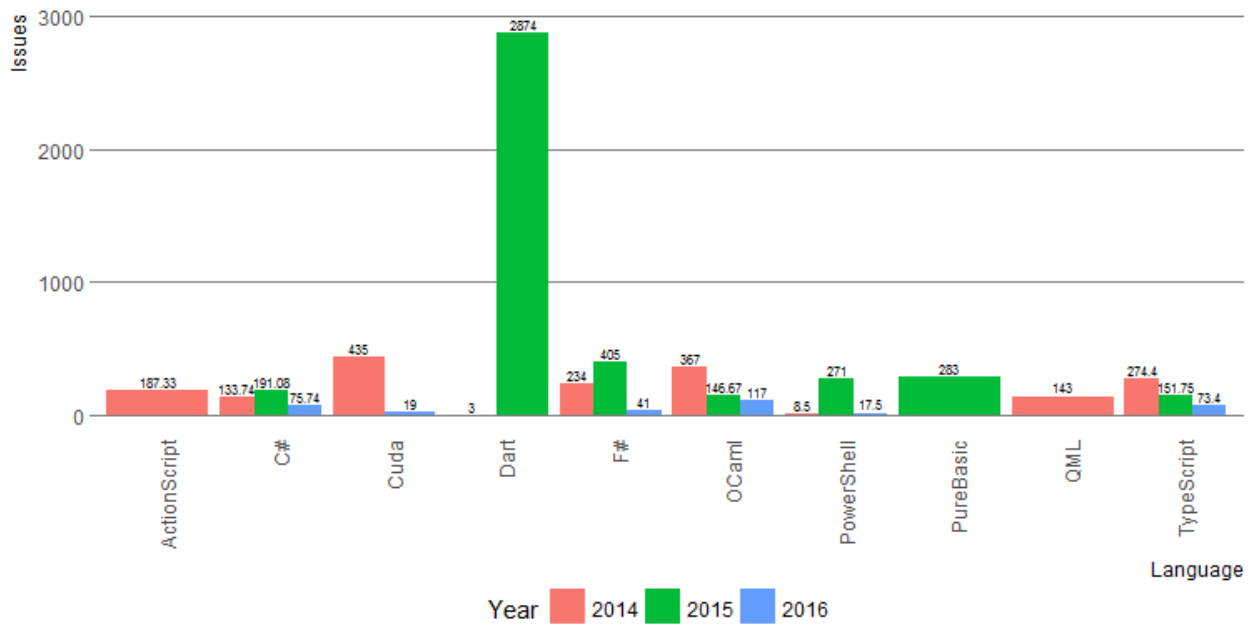
## Languages with most open issues on GitHub

Depicts top language repositories with highest mean open issue count

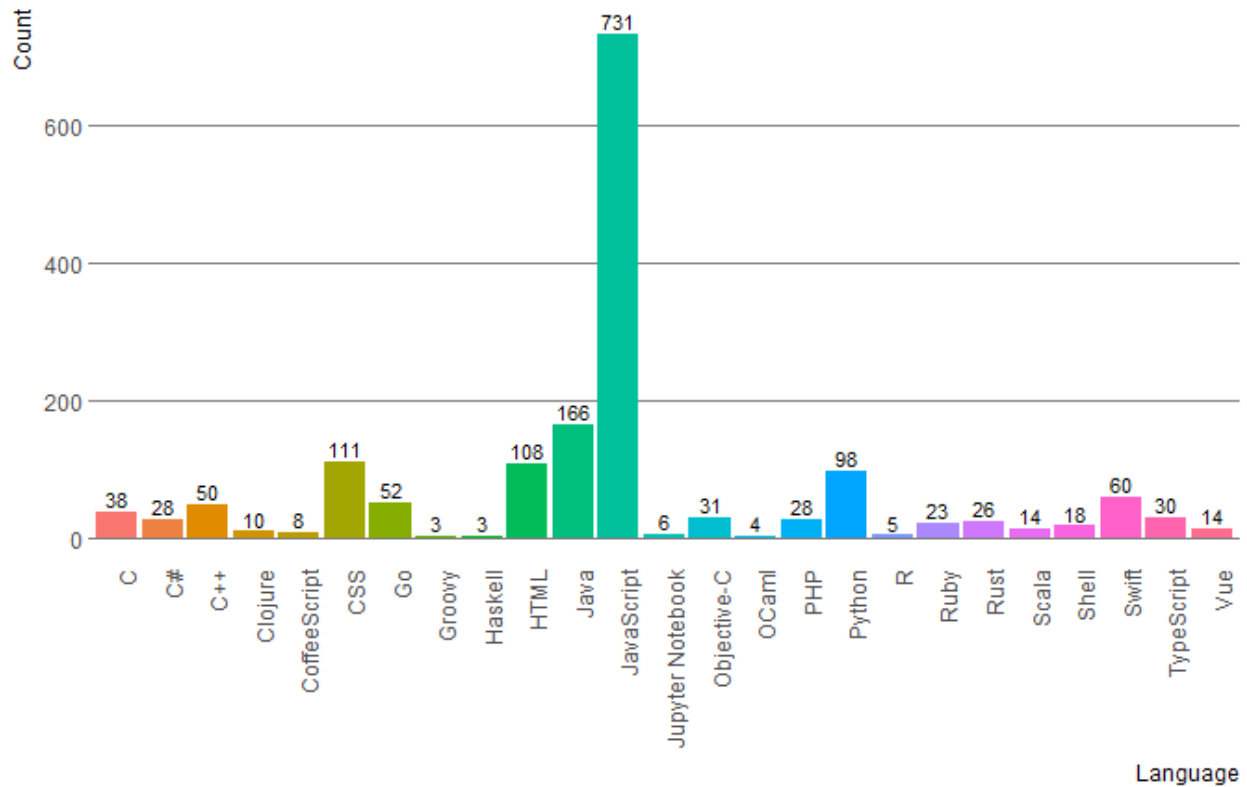


## Languages with most open issues in GitHub over time

Depicts top language repositories with highest mean open issue count over time

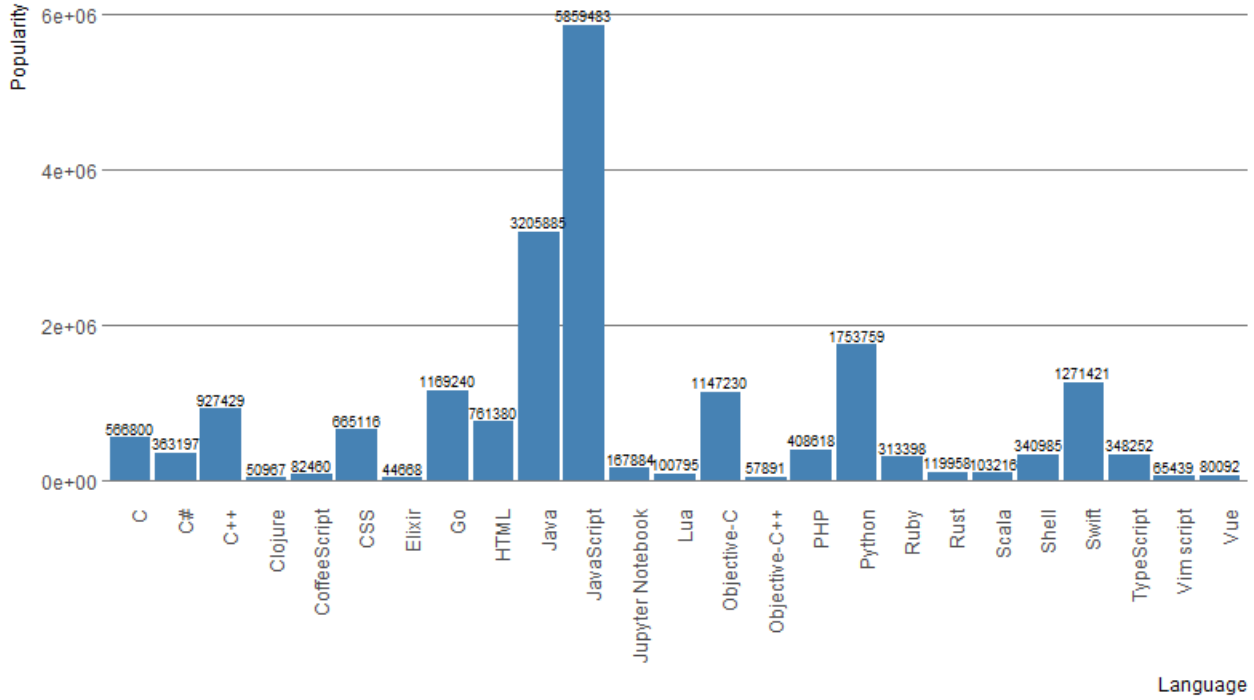


## Most helpful repositories in GitHub by Language



# Languages with most Popularity Score in GitHub

Depicts top language repositories with highest popularity score

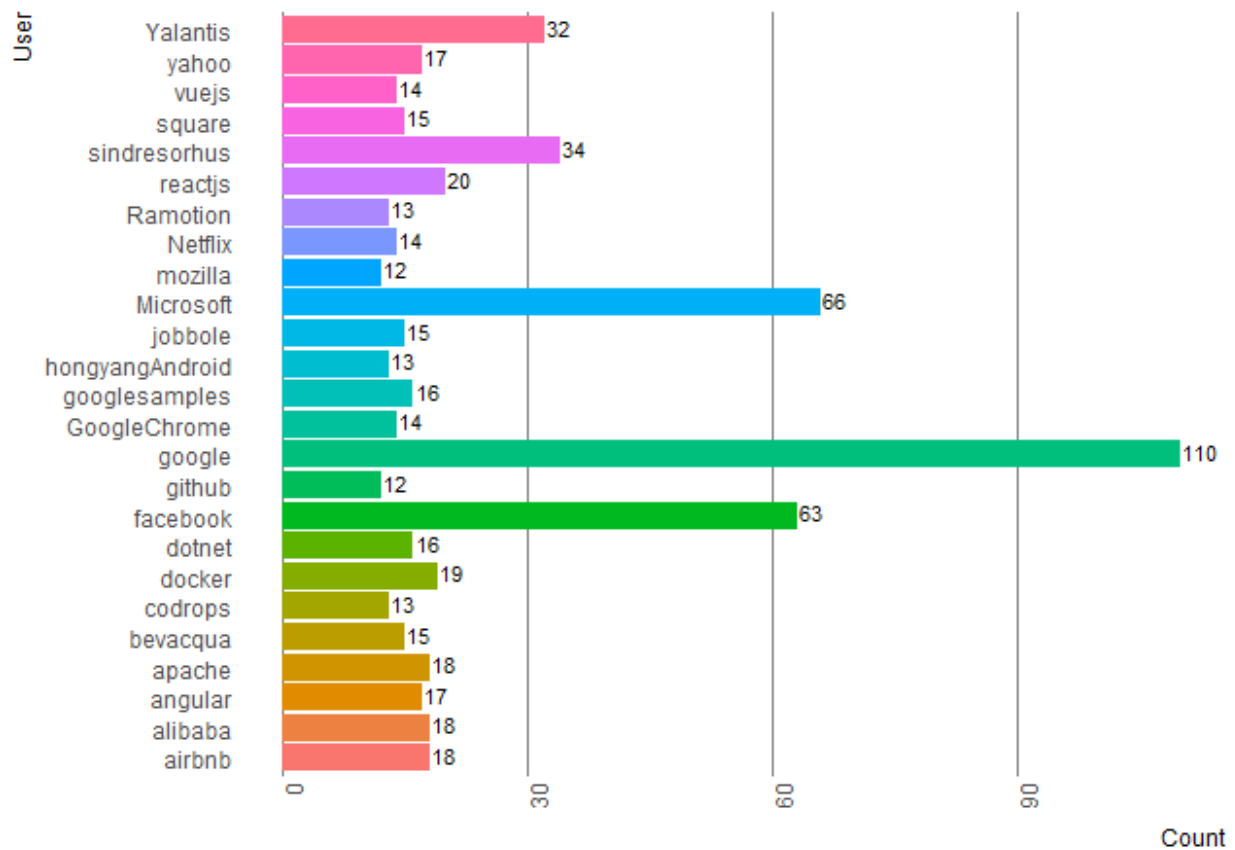


	owner	ASP	ActionScript	ApacheConf	AppleScript	Arduino	Assembly	AutoHotkey	Awk	Batchfile	C	C#	C++
1622	antirez	0	0	0	0	0	0	0	0	0	4	0	0
2195	citusdata	0	0	0	0	0	0	0	0	0	3	0	0
2859	facebook	0	0	0	0	0	0	0	0	0	3	0	9
3165	google	0	0	0	0	0	0	0	0	0	3	0	23
4950	ntop	0	0	0	0	0	0	0	0	0	3	0	0
357	EZLippi	0	0	0	0	0	0	0	0	0	2	0	0
816	Microsoft	0	0	0	0	0	0	0	0	0	2	17	15
995	Qjhoo360	0	0	0	0	0	0	0	0	0	2	0	2
1652	apple	0	0	0	0	0	0	0	0	0	2	0	1
2036	c9s	0	0	0	0	0	0	0	0	0	2	0	0

	Var1	Var2	value
403	Eagle	Arduino	0.8164772
1118	PureBasic	C++	0.6719623
3479	OCaml	Hack	0.7746188
3481	Objective-C++	Hack	0.8838914
5571	Objective-C++	OCaml	0.6844834
5865	PostScript	Objective-J	1.0000000

## Top contributing users on GitHub

Users with the most trending repositories

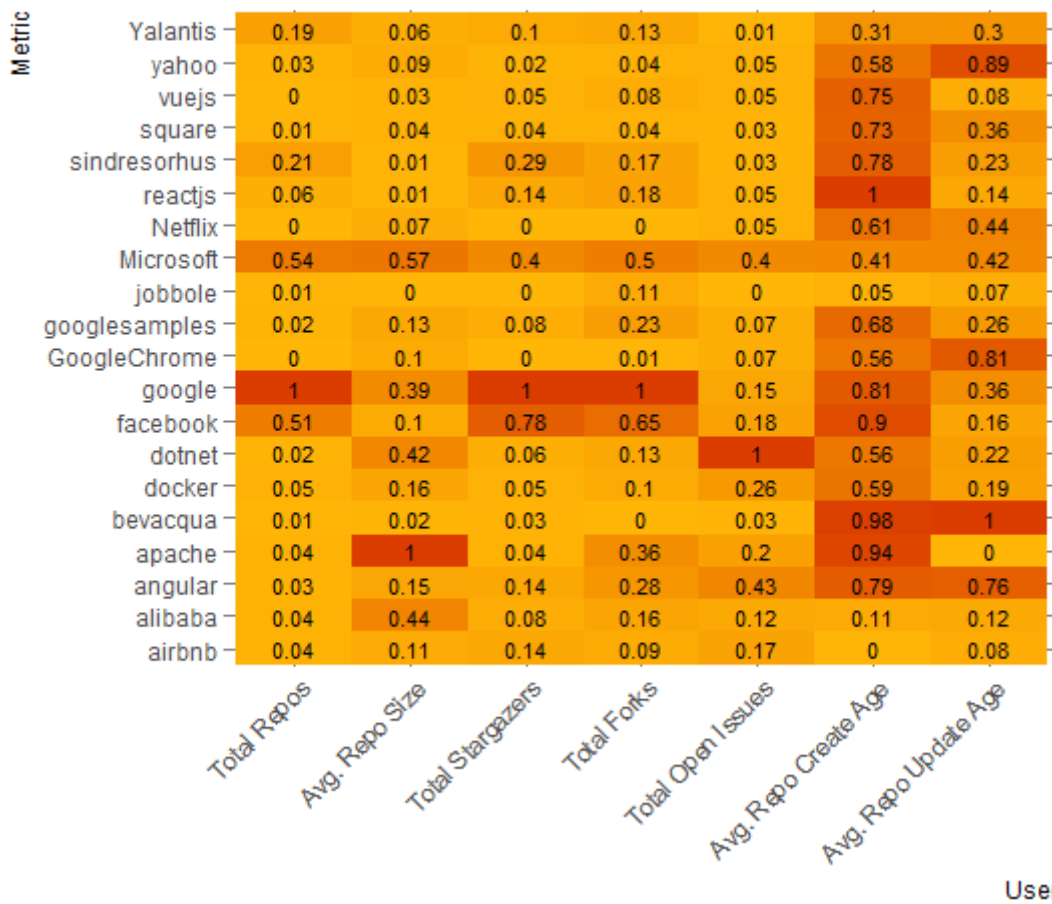


	User	Total Repos	Avg. Repo Size	Total Stargazers	Total Forks	Total Open Issues	Avg. Repo Create Age	Avg. Repo Update Age
1	google	110	51002.0818	367855	65872	8436	734.5909	4.200000
2	Microsoft	66	73480.2121	162025	34115	13092	597.4697	4.363636
3	facebook	63	12748.3333	293052	43315	5726	763.7619	3.666667
4	sindresorhus	34	823.3529	123868	12599	503	724.4412	3.852941
5	Yalantis	32	7917.0000	56388	9857	214	562.6875	4.031250
6	reactjs	20	1197.3000	71494	13115	568	799.7500	3.600000
7	docker	19	21335.0526	39221	7939	2421	658.4737	3.736842
8	airbnb	18	14871.2222	69384	7895	1570	455.4444	3.444444
9	alibaba	18	57282.1111	49804	11902	1050	493.7222	3.555556
10	apache	18	129155.3889	36920	25123	1824	778.0556	3.222222
11	angular	17	19852.4118	69383	19591	3598	726.8235	5.294118
12	yahoo	17	11650.5882	30052	4598	482	655.2353	5.647059
13	dotnet	16	53718.1250	42736	10253	7883	647.5000	3.812500
14	googlesamples	16	17200.3125	49216	16752	576	690.1875	3.937500
15	bevacqua	15	3281.6667	34193	2112	232	791.9333	5.933333
16	jobbole	15	73.0000	23737	8977	23	472.4000	3.400000
17	square	15	5528.5333	34912	4371	278	707.2667	4.200000
18	GoogleChrome	14	12635.2143	23522	2718	483	648.2143	5.428571
19	Netflix	14	8709.0714	22415	1826	334	665.7857	4.428571
20	vuejs	14	4304.5714	38985	6766	378	713.9286	3.428571



# User Activity Metrics Heatmap

Analyzing trending user activity metrics on GitHub



$$PS = (2 \times forks) + stars$$

# Chapter 6: Analyzing Software Collaboration Trends II – Answering Your Questions with StackExchange






## Top 500 answerers on the site

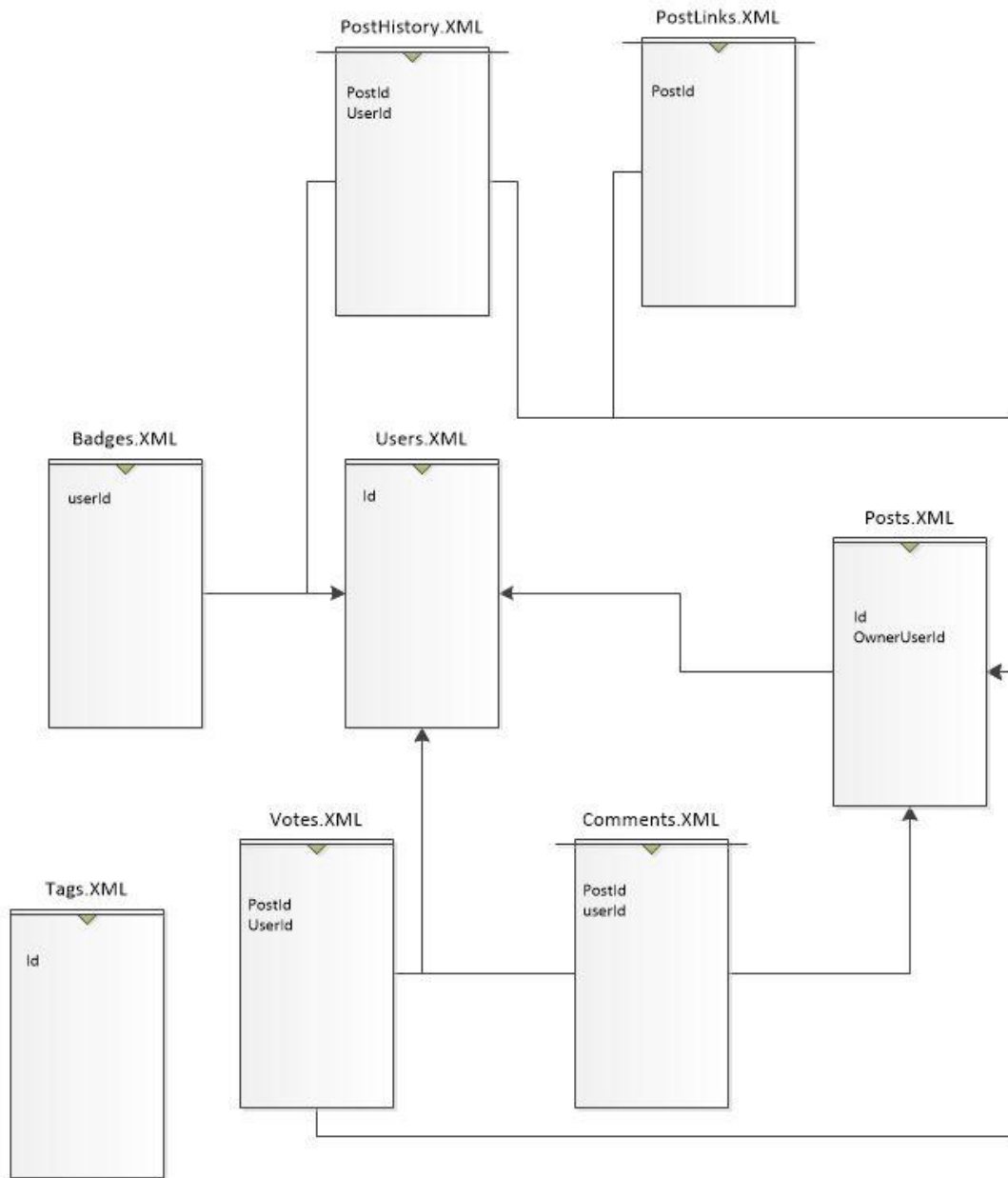


36

A list of the top 500 users with the highest average answer score excluding community wiki / closed posts or users with less than 10 answers

 **stackoverflow**  
Q&A for programmers

```
SELECT
  TOP 500
  Users.Id as [User Link],
  Count(Posts.Id) AS Answers,
  CAST(AVG(CAST(Score AS float)) as numeric(6,2)) AS [Average Answer Score]
FROM
  Posts
  INNER JOIN
  Users ON Users.Id = OwnerUserId
WHERE
  PostTypeId = 2 and CommunityOwnedDate is null and ClosedDate is null
GROUP BY
  Users.Id, DisplayName
HAVING
  Count(Posts.Id) > 10
ORDER BY
  [Average Answer Score] DESC
```



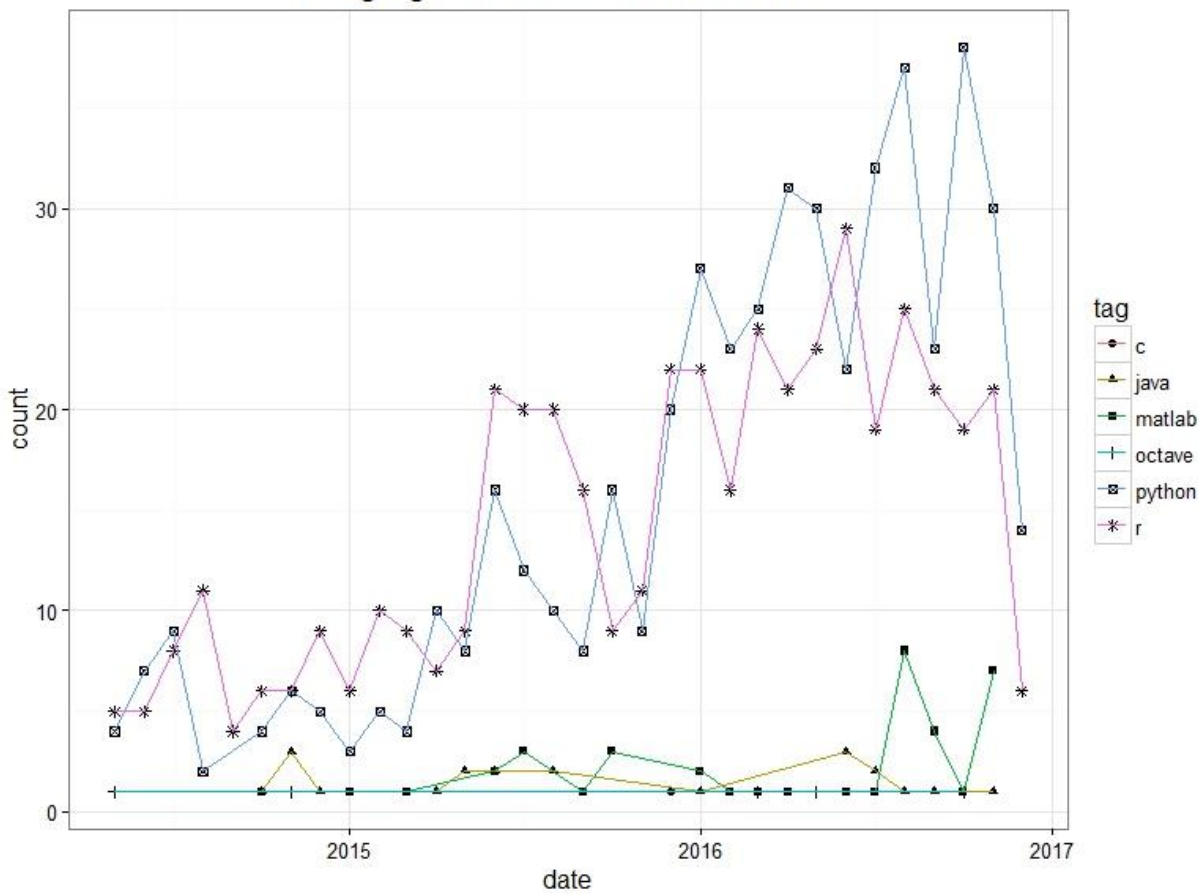
```
<?xml version="1.0" encoding="utf-8" ?>
<posts>
  <row Id="5" PostTypeId="1" CreationDate="2014-05-13T23:58:30.457"
Score="7" ViewCount="315" Body="&lt;p&gt;I've always been interested in machine learning, but I can't figure out one thing about :
OwnerUserId="5" LastActivityDate="2014-05-14T00:36:31.077"
Title="How can I do simple machine learning without hard-coding behavior?"
Tags="&lt;machine-learning&gt;" AnswerCount="1"
CommentCount="1" FavoriteCount="1" ClosedDate="2014-05-14T14:40:25.950"
/>
  <row Id="7" PostTypeId="1" AcceptedAnswerId="10"
CreationDate="2014-05-14T00:11:06.457"
Score="2" ViewCount="297" Body="&lt;p&gt;As a researcher and instructor, I'm looking for open-source books (or similar materials)
OwnerUserId="36" LastEditorUserId="97"
LastEditDate="2014-05-16T13:45:00.237"
LastActivityDate="2014-05-16T13:45:00.237"
Title="What open-source books (or other materials) provide a relatively thorough overview of data science?"
Tags="&lt;education&gt;&lt;open-source&gt;"
AnswerCount="3" CommentCount="4" FavoriteCount="1"
ClosedDate="2014-05-14T08:40:54.950"
/>
</posts>
```

PostsDF									
Filter									
	Id	PostTypeId	CreationDate	Score	ViewCount	Body	OwnerUserId	LastActivityDate	Title
1	5	1	2014-05-13 23:58:30	7	315	<p>I've always been interested in machine learning, but...	5	2014-05-14T00:36:31.077	How can I do simple machine learning without hard-cod...
2	7	1	2014-05-14 00:11:06	2	297	<p>As a researcher and instructor, I'm looking for open...	36	2014-05-16T13:45:00.237	What open-source books (or other materials) provide a ...
3	9	2	2014-05-14 00:36:31	4	NA	<p>Not sure if this fits the scope of this SE, but here's a...	51	2014-05-14T00:36:31.077	NA
4	10	2	2014-05-14 00:53:43	10	NA	<p>One book that's freely available is "The Elements of ...	22	2014-05-14T00:53:43.273	NA
5	14	1	2014-05-14 01:25:59	16	751	<p>I am sure data science as will be discussed in this fo...	66	2014-06-20T17:36:05.023	Is Data Science the Same as Data Mining?
6	15	1	2014-05-14 01:41:23	2	287	<p>In which situations would one system be preferred ...	64	2014-05-14T01:41:23.110	What are the advantages and disadvantages of SQL vers...
7	16	1	2014-05-14 01:57:56	15	247	<p>I use <a href="http://www.csie.ntu.edu.tw/~gjin/li/...	63	2014-05-17T16:24:14.523	Use liblinear on big data for semantic analysis
8	17	5	2014-05-14 02:49:14	0	NA	<p><a href="http://www.csie.ntu.edu.tw/~gjin/libsvm/...	63	2014-05-16T13:44:53.470	NA
9	18	4	2014-05-14 02:49:14	0	NA		-1	2014-05-14T02:49:14.580	NA

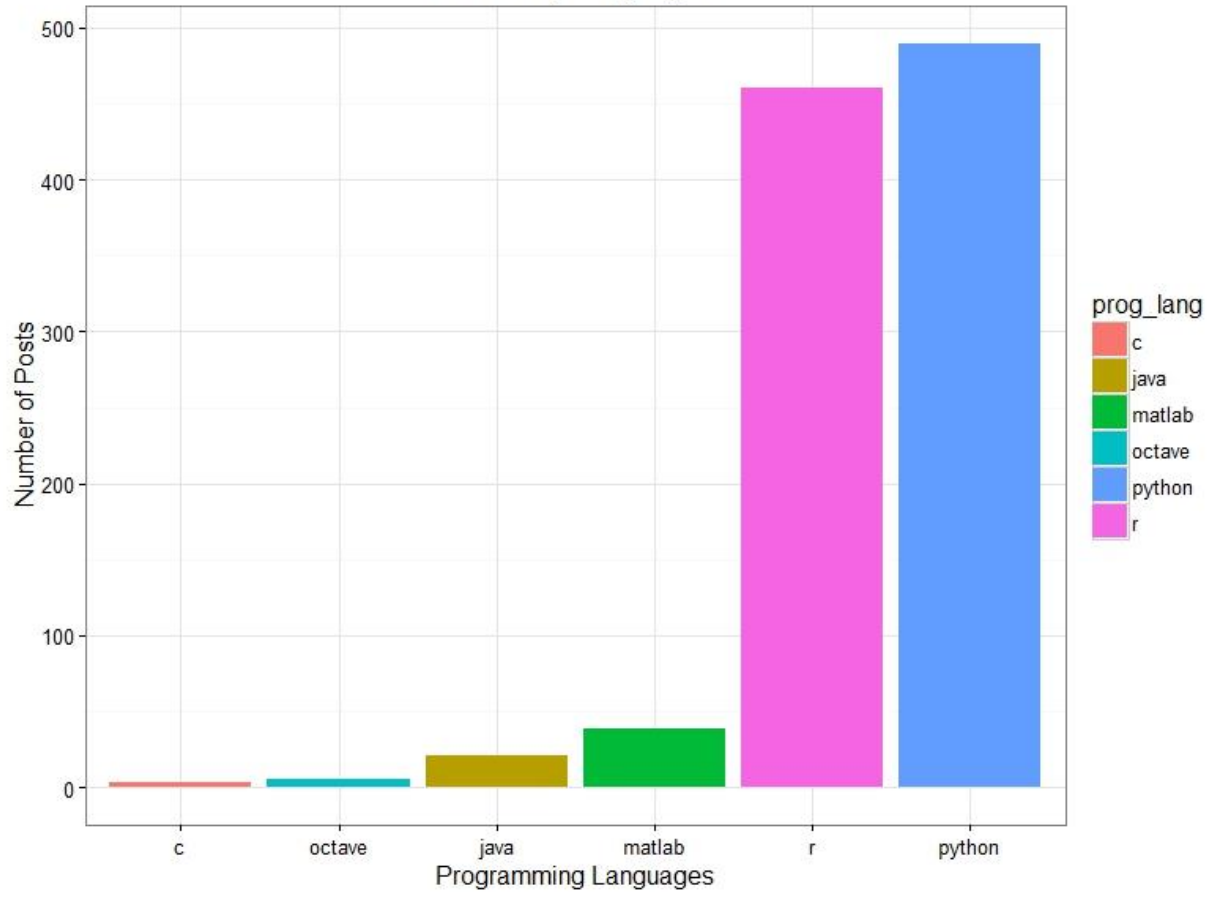
UsersDF							
Filter							
	Id	Reputation	CreationDate	DisplayName	LastAccessDate	WebsiteUrl	Location
1	-1	1	2014-05-13T21:29:22.820	Community	2014-05-13T21:29:22.820	http://meta.stackexchange.com/	on the server farm
2	1	101	2014-05-13T22:58:54.810	Adam Lear	2016-09-23T19:54:43.803	NA	New York, NY
3	2	101	2014-05-13T22:59:19.787	Geoff Dalgas	2016-07-10T21:11:53.633	http://stackoverflow.com	Corvallis, OR
4	3	101	2014-05-13T23:15:34.483	hichris123	2016-11-18T02:24:26.463	NA	NA
5	4	101	2014-05-13T23:16:09.937	Ben Collins	2014-08-04T15:25:54.810	http://benjamincollins.com	Republic of Texas
6	5	139	2014-05-13T23:16:11.013	Doorknob	2015-06-26T08:57:42.167	http://keyboardfire.com	Texas, US
7	6	101	2014-05-13T23:16:26.517	gerrit	2016-08-18T10:29:56.080	http://www.topjaklont.org/	Reading, England
8	7	101	2014-05-13T23:17:05.443	Undo	2016-11-17T16:12:34.487	http://keybase.io/undo	NA
9	8	101	2014-05-13T23:17:26.850	Jon Ericson	2016-04-12T18:01:05.903	http://jericson.github.io/	Downtown Burbank
10	9	802	2014-05-13T23:18:21.653	rolfl	2016-11-26T05:05:22.650	http://stackoverflow.com/users/1369656/rolfl	Canada
11	10	101	2014-05-13T23:18:31.953	Dave Kincaid	2016-12-02T02:24:25.150	http://dkincaid.github.io	Eau Claire, WI



Language wise Post Trends over Time

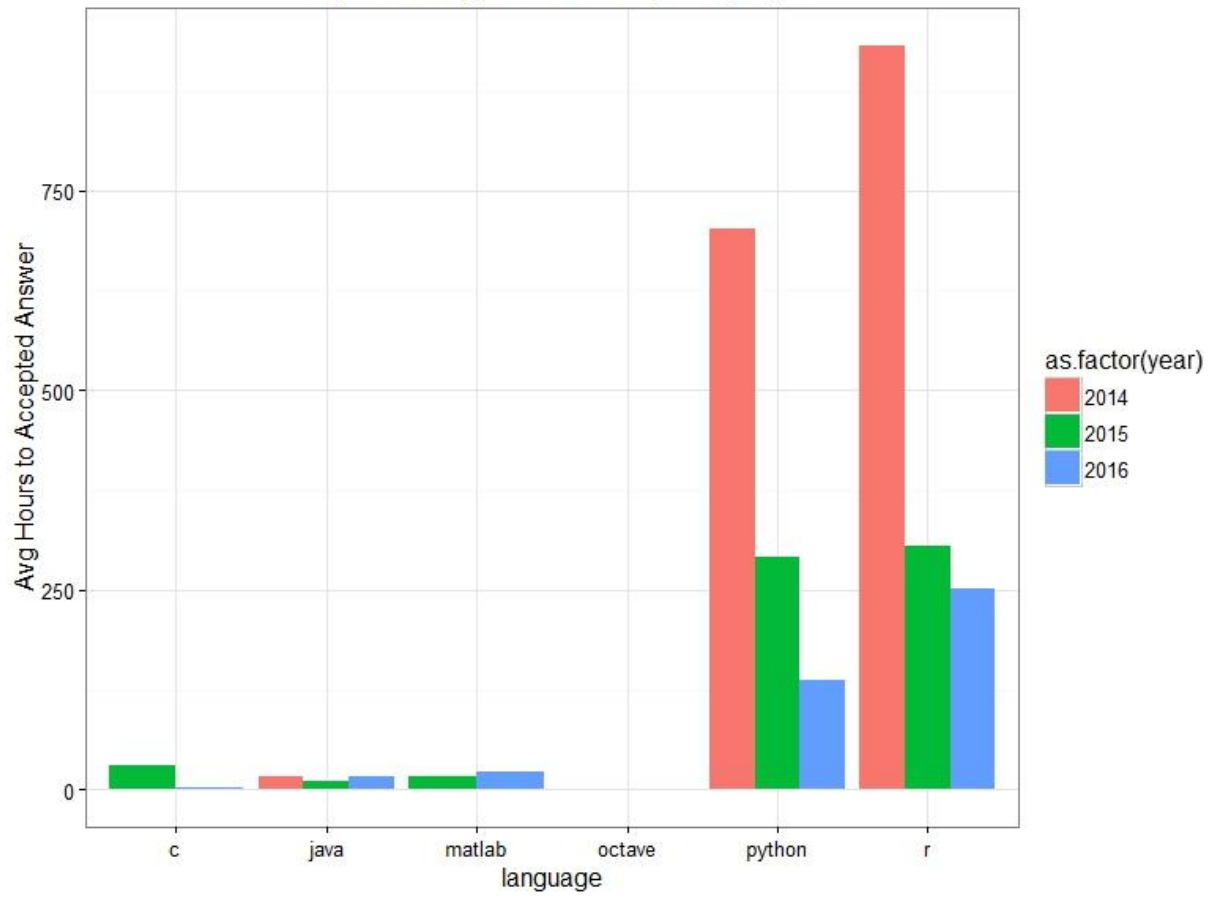


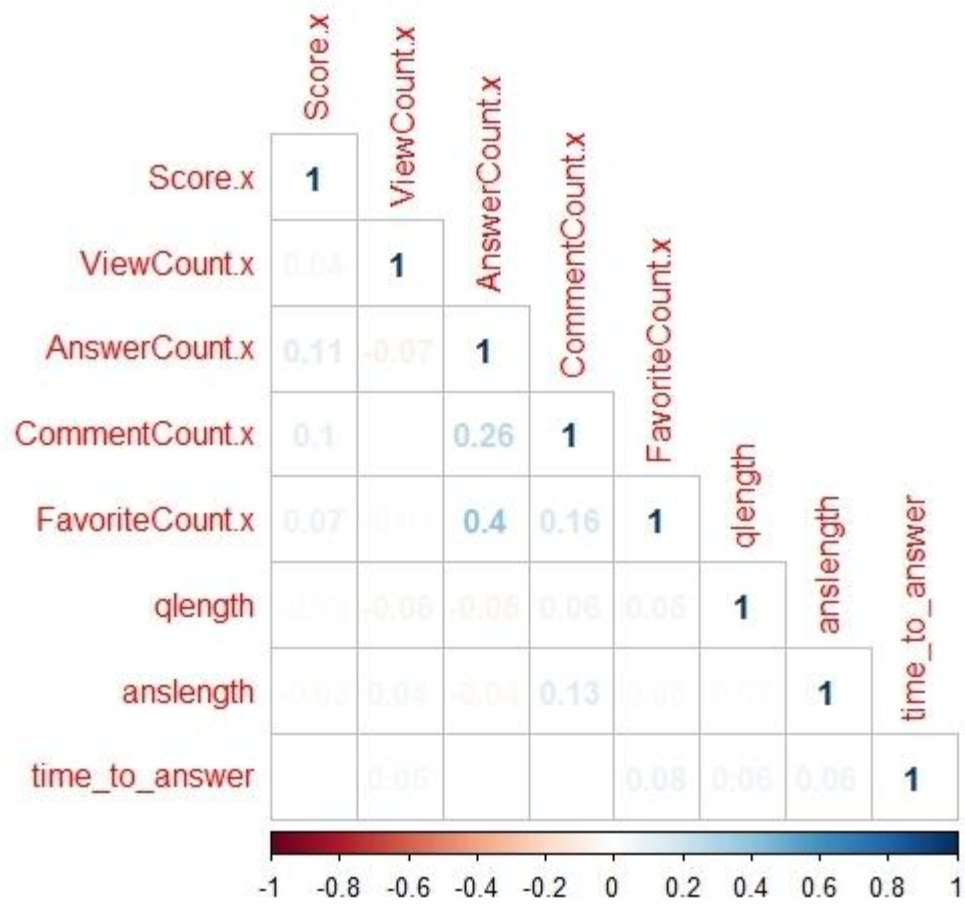
Posts By Language



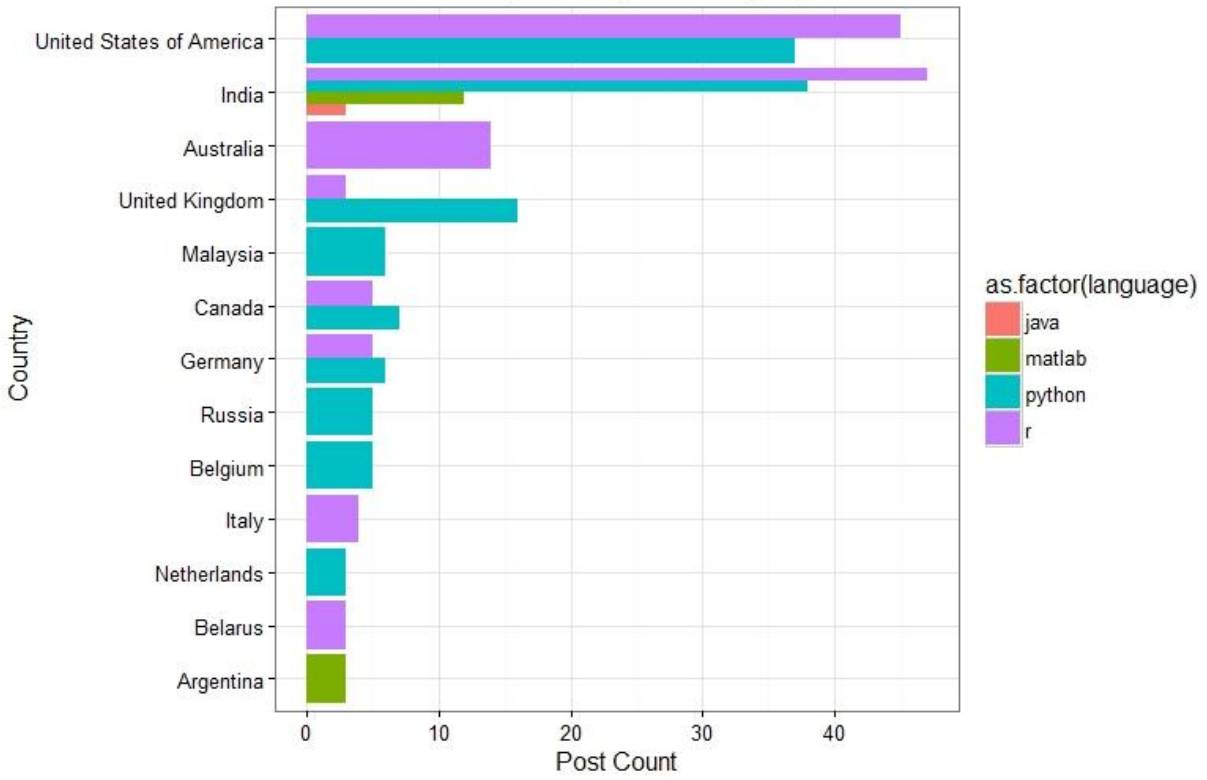


Avg Time to get answers by Language

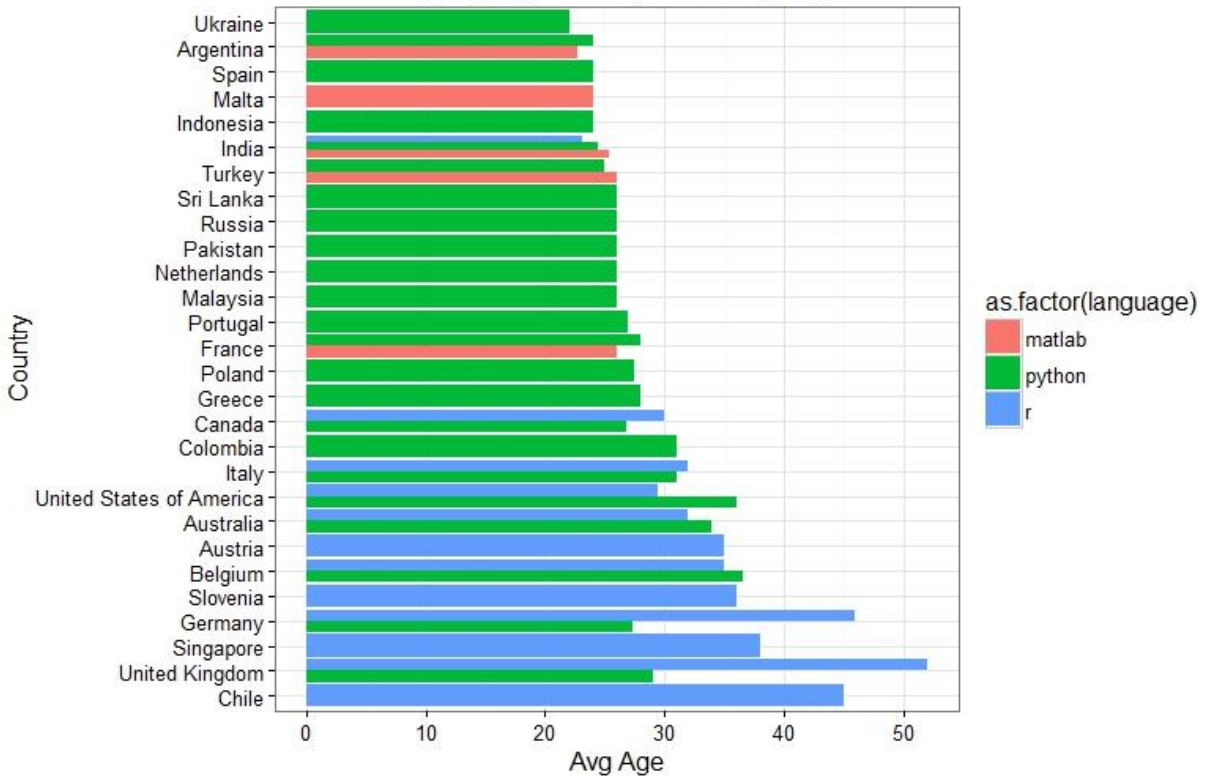




Posts by Country and Language



Avg Age by Country and Language



# Chapter 7: Believe what You See – Flickr Data Analytics

## The App Garden

[Create an App](#) | [API Documentation](#) | [Feeds](#) | [What is the App Garden?](#)

All the apps in the [App Garden](#) were created by Flickr members (like you!) using the [Flickr API](#). Here's how:



### 1 Get your API Key

Ready to build something? You'll need a key first.

[Request an API Key](#)

### 2 Put your app in the Garden

Already have your key and built your app? You can add your app to the Garden from the [Apps by You](#) page.

Need help? Browse the [API Documentation](#) or read the [App Garden FAQ](#)

Tell us about your app:

Owner [REDACTED]

This app will be associated with your [REDACTED] account. You will not be able to change this after you submit your application.

What's the name of your app?

What are you building?  
(And trust us when we say you can't be detailed enough)

I acknowledge that Flickr members own all rights to their content, and that it's my responsibility to make sure that my project does not contravene those rights.

I agree to comply with the [Flickr API Terms of Use](#).

or

# The App Garden

[Create an App](#) | [API Documentation](#) | [Feeds](#) | [What is the App Garden?](#)

Done! Here's the API key and secret for your new app:



Flickr Sample App

Key:

[Redacted API Key]

Secret:

[Redacted API Secret]

[Edit app details](#) - [Edit auth flow for this app](#) - [View all Apps by You](#)

## What to do next

If your key is to use in an application that someone else developed, for example to display your own or your group's photos on your website or blog, then you're all done!

If your key is for an app that you're developing, here are things to help you build and promote your app:


- **Build your app**

You're all set to build something cool with the API key and secret! Make sure you know what you can and can't do with the images and data on Flickr before you design your app. Save some time by reading these reference guides first:

- [API Terms of Use](#)
- [Community Guidelines](#)
- [API Documentation](#)
- [Flickr API Group](#)



# Hi Raghav Bali

 **Flickr Sample App wants to link to your Flickr account.**

This is a third-party service. If you don't trust it with access to your account, then you should not authorize it.

By authorizing this link, you'll allow **Flickr Sample App** to:

- ✔ **Access** your Flickr account (including private content)
- ✔ **Upload, Edit, and Replace** photos and videos in your account
- ✔ **Interact** with other members' photos and videos (comment, add notes, favorite)

**Flickr Sample App** will *not* have permission to:

- ✘ **Delete** photos and videos from your account

**OK, I'LL AUTHORIZE IT** NO THANKS

**What's going on here?**

Flickr encourages other developers to build cool tools for you to play with, but you must authorize these third parties to access your account.

**Want to know more?**

A wealth of information lies within the [Flickr Services](#) page.

Your Yahoo! and Flickr passwords will always remain private, but **Flickr Sample App** will have the permissions listed above until you revoke its link to your account. (You can revoke such links at any time in the [Extending Flickr](#) section of your account prefs.)



Authentication complete. Please close this page and return to R.

	date	photos.page	photos.pages	photos.perpage	photos.total	photos.photo.id	photos.photo.owner
1	2017-04-13	1	5	100	500	33889334161	70992083@N07
2	2017-04-13	1	5	100	500	34008897645	28306652@N03
3	2017-04-13	1	5	100	500	34004112525	136761463@N05
4	2017-04-13	1	5	100	500	33964817906	88576252@N00
5	2017-04-13	1	5	100	500	33631068610	55032983@N07
6	2017-04-13	1	5	100	500	33633604560	10641418@N00
7	2017-04-13	1	5	100	500	34014561785	89187987@N03
8	2017-04-13	1	5	100	500	33964869026	34368269@N04
9	2017-04-13	1	5	100	500	33846511952	100360106@N04

General Permissions **Meta Info** Preview

JPEG Exif

Comment:



Creation Date: 05-01-14  
Creation Time: 12:38:36 am  
Dimensions: 2560 x 1920 pixels  
Exposure Time: 0.100 (1/10)  
JPEG Quality: Unknown  
Aperture: f/3.3  
Color Mode: Color  
Date/Time: 05-01-14 12:38:36 am  
Flash Used: Off  
Focal Length: 6.3 mm  
ISO Equiv.: 100  
JPEG Process: Baseline  
Camera Manufacturer: PENTAX Corporation  
Metering Mode: Pattern  
Camera Model: PENTAX Optio WP  
Orientation: 1

OK

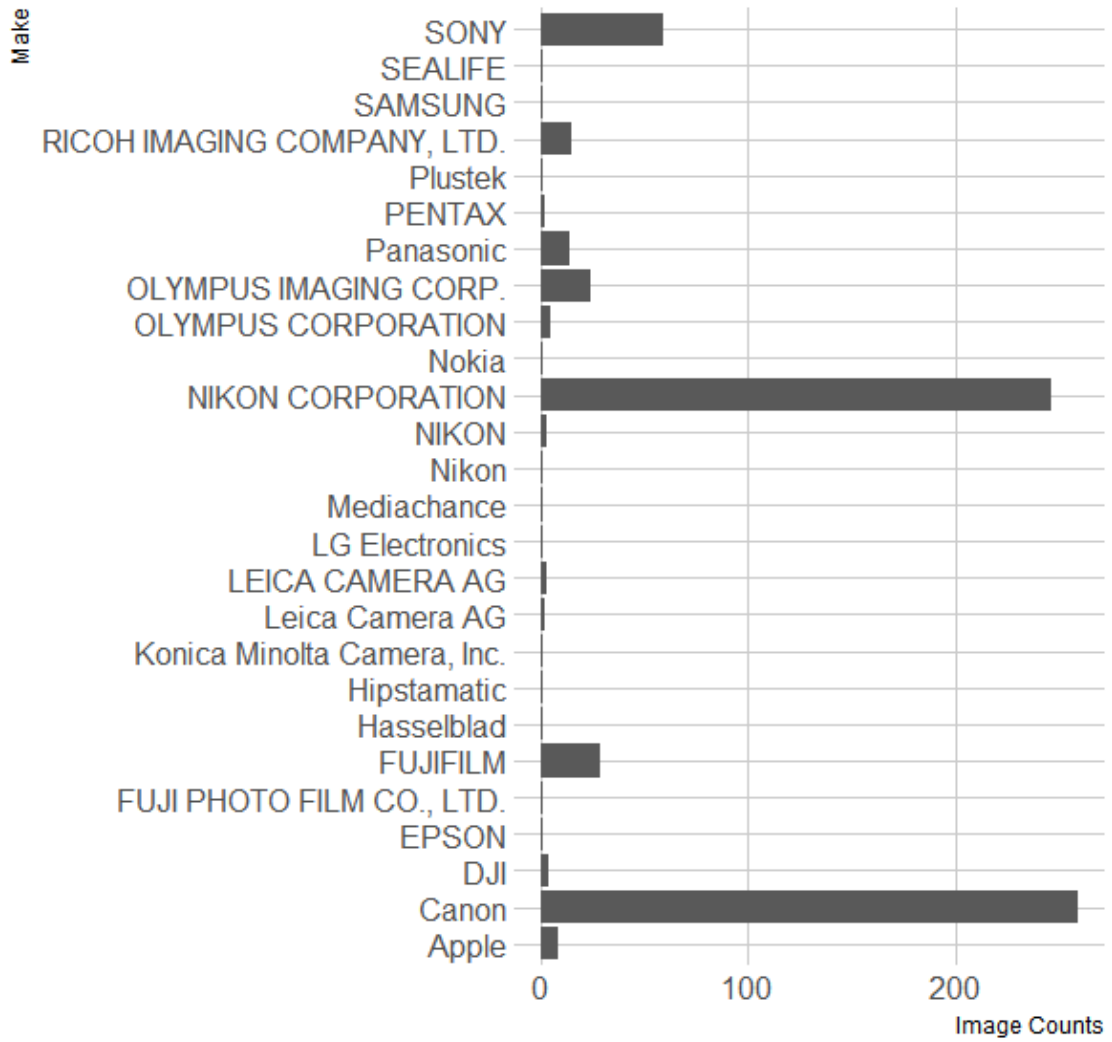
Cancel



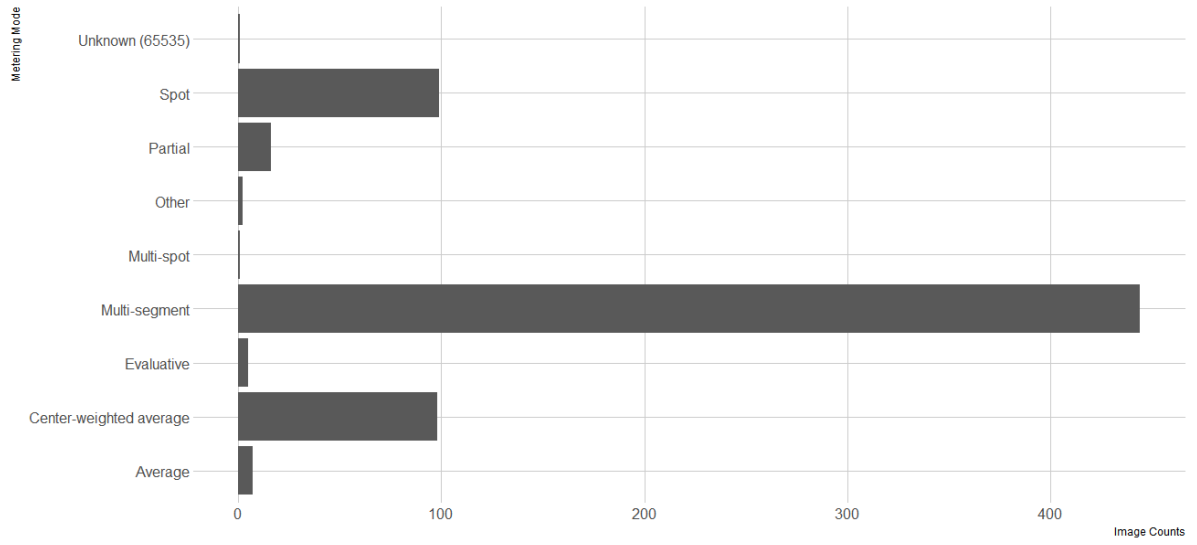
iso	make	focal_length	white_balance	metering_mode
160	NIKON CORPORATION	24.0	Manual	Multi-segment
100	Canon	100.0	Manual	Spot
100	Canon	17.0	Auto	Multi-segment
100	Canon	50.0	Auto	Multi-segment
3200	Canon	NA	Manual	Multi-segment
100	SONY	85.0	Manual	Spot
NA	NA	NA	NA	NA
50	SONY	130.0	Manual	Multi-segment
NA	NA	NA	NA	NA
160	Canon	182.0	Auto	Multi-segment
100	Canon	58.0	Auto	NA

```
> summary(interestingDF[,c('iso','make','focal_length','white_balance','metering_mode','views')])
      iso      make      focal_length  white_balance  metering_mode      views
Min.   : 20.0   Length:994   Min.   : 0.00   Length:994   Length:994   Min.   : 843
1st Qu.: 100.0  Class :character 1st Qu.: 19.25  Class :character  Class :character 1st Qu.: 13543
Median : 200.0  Mode  :character Median : 50.00  Mode  :character  Mode  :character Median : 25423
Mean   : 588.5          Mean :135.45          Mean :37464
3rd Qu.: 400.0          3rd Qu.:129.10          3rd Qu.: 61411
Max.   :25600.0        Max.   :850.00          Max.   :151069
NA's   :316           NA's   :335
```

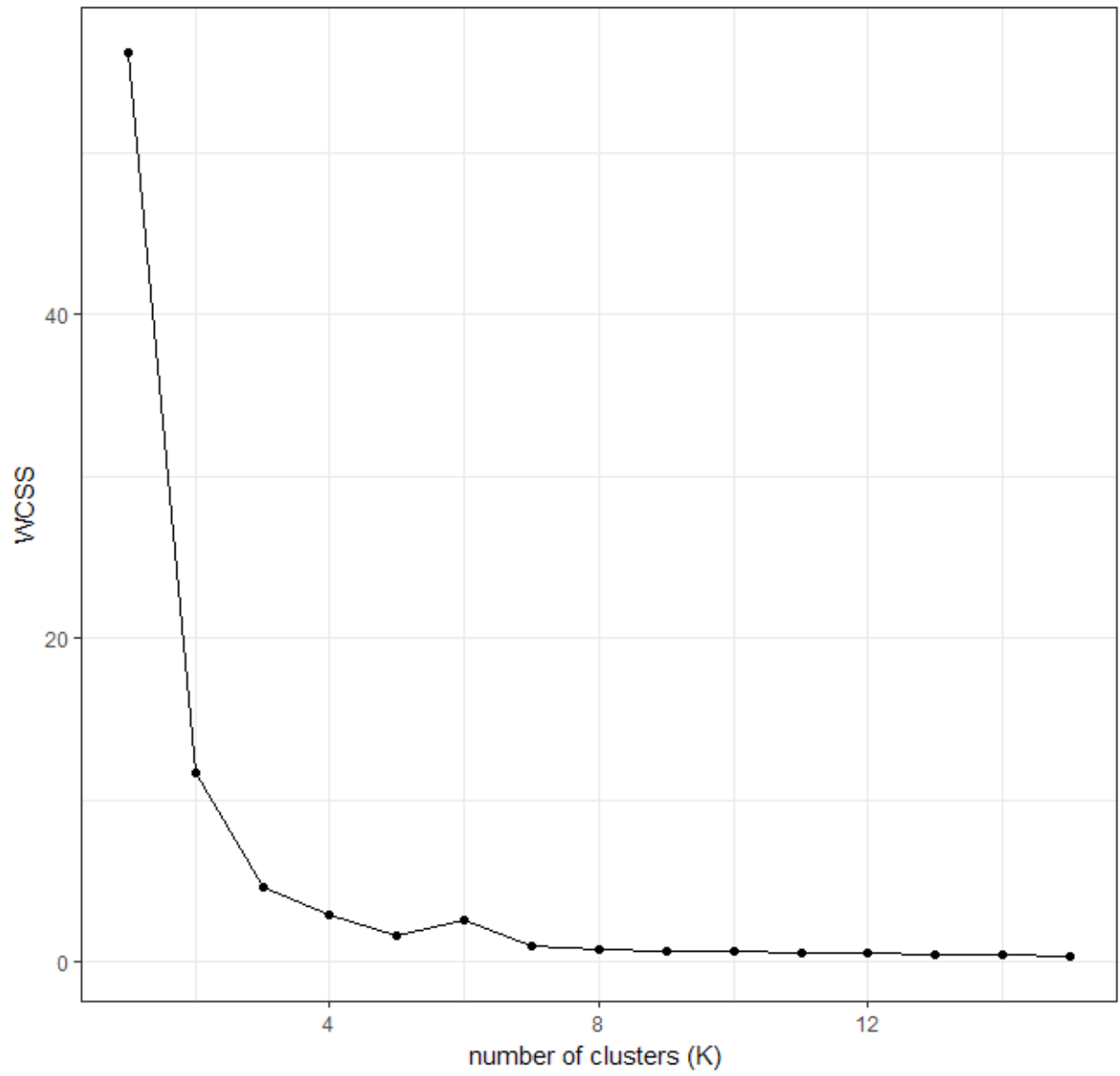
## Make wise Image distribution



### Metering Mode wise Image distribution

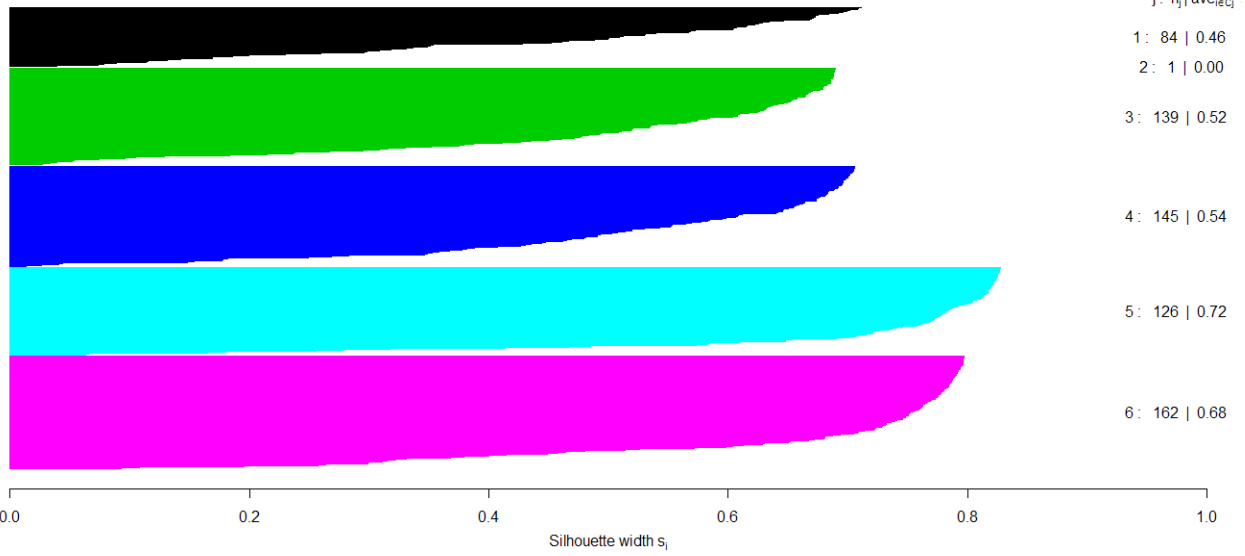


## Elbow Analysis

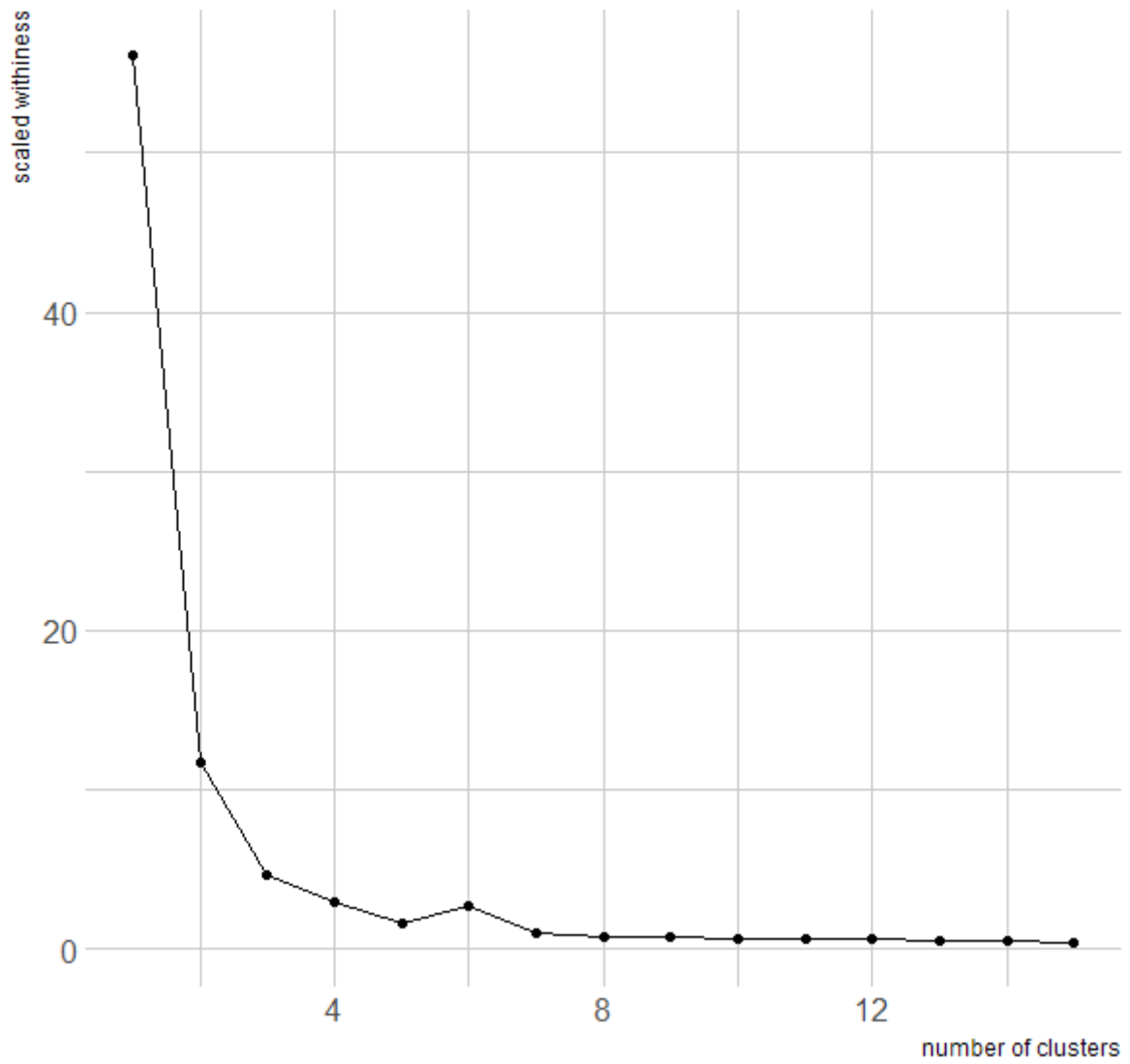


Silhouette plot of (x = fit\$cluster, dist = dissimilarity\_matrix)

n = 657



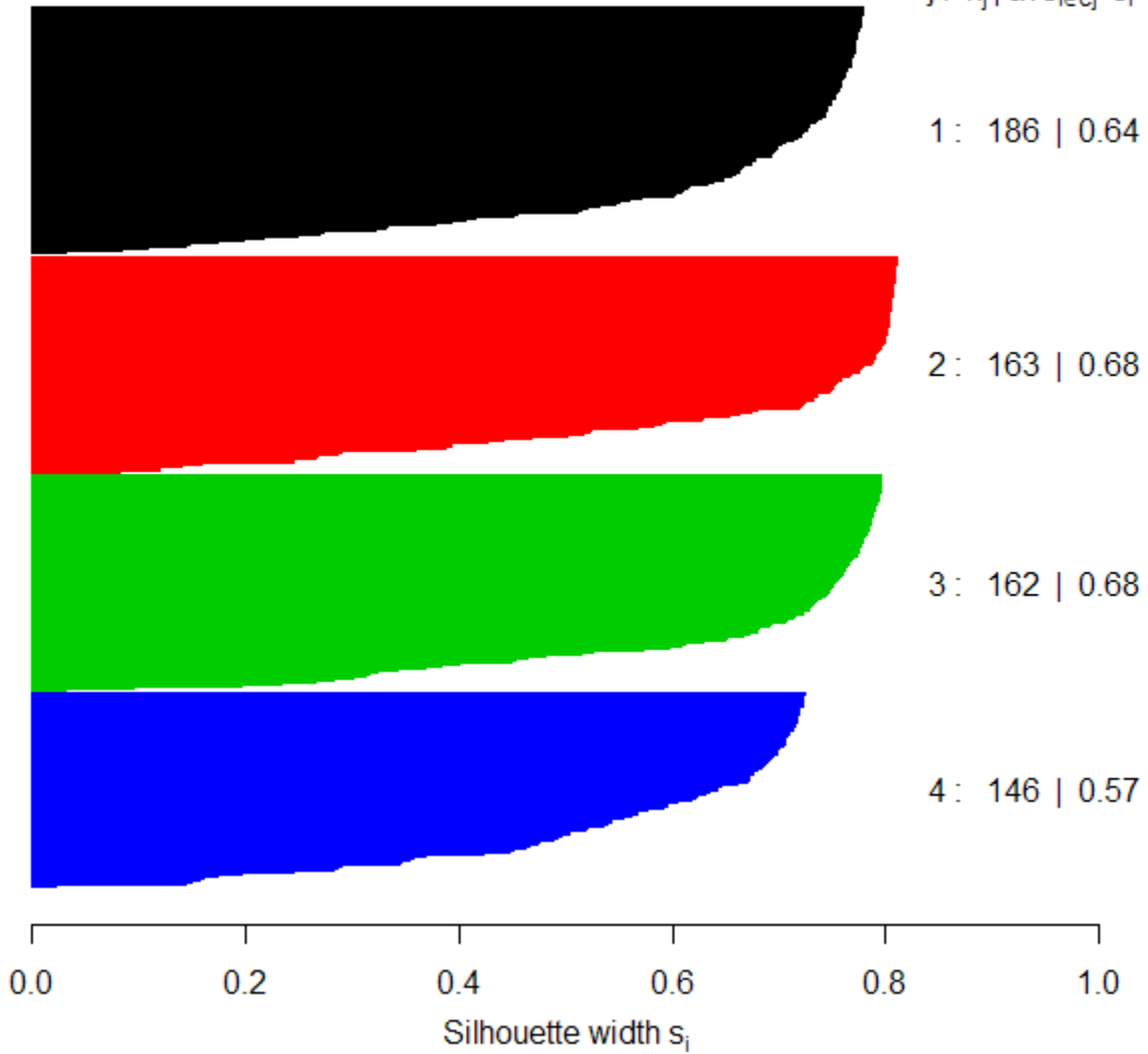
## Elbow Analysis



**Silhouette plot of (x = fit\$cluster, dist = dissimilarity\_matrix)**

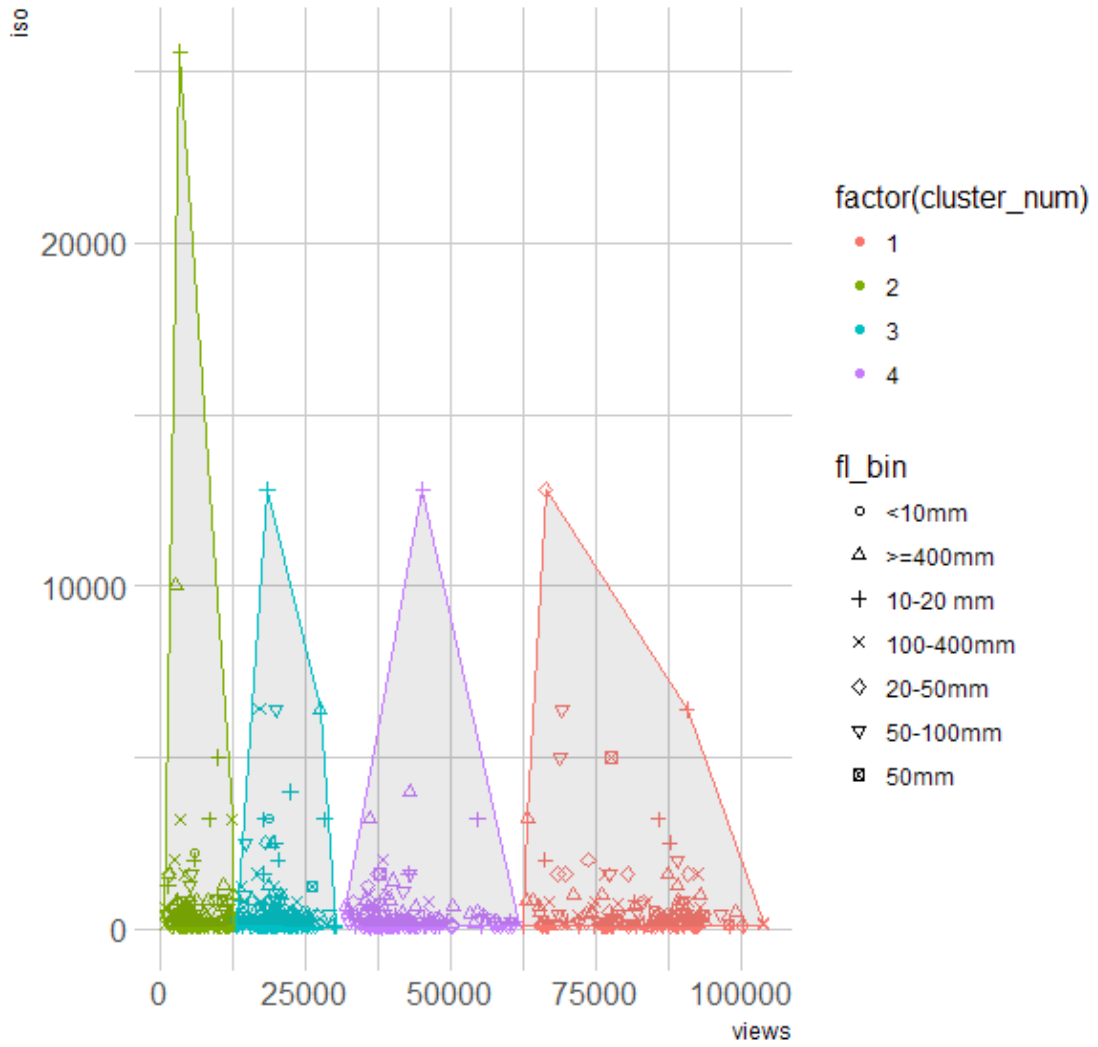
n = 657

4 clusters  $C_j$   
 $j: n_j | \text{ave}_{i \in C_j} s_i$

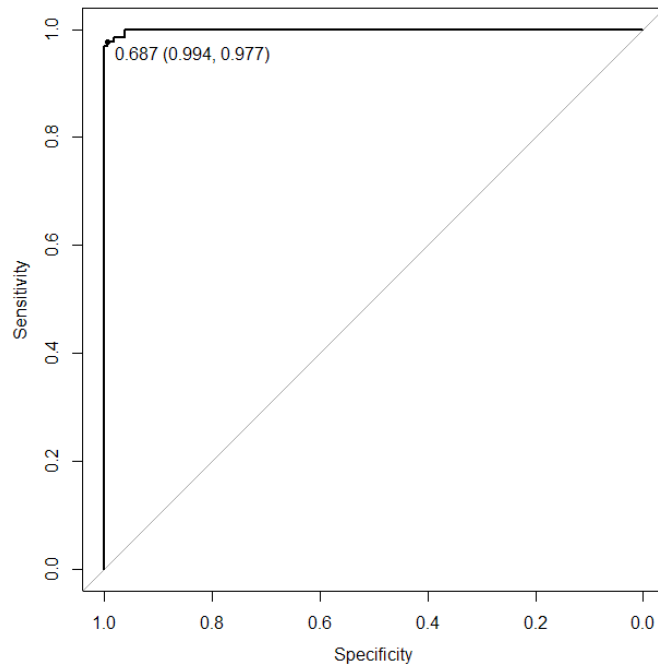


Average silhouette width : 0.65

# Clustered Images







Confusion Matrix and Statistics

		0	1
Reference			
Prediction	0	151	6
	1	2	258
Accuracy :		0.9808	
95% CI :		(0.9625, 0.9917)	
	63	0.584	0.416
	64	0.864	0.136
	65	0.582	0.418
	66	0.580	0.420
	67	0.560	0.440
	68	0.832	0.168
	74	0.666	0.334
	75	0.686	0.314
	96	0.368	0.632

$$s(i) = \frac{o(i) - c(i)}{\max\{o(i), c(i)\}}$$

# Chapter 8: News – The Collective Social Media!

The screenshot shows the Guardian website's homepage. At the top, there's a navigation bar with 'sign in', 'become a supporter', 'subscribe', and a search icon. The Guardian logo is prominently displayed on the right. Below the header, a secondary navigation bar lists various sections like 'UK', 'world', 'sport', etc. The main content area is divided into several sections: a weather widget for Bangalore, a large video player for a report on North Korea with a yellow play button, and several article thumbnails including 'Turkey / Erdoğan's referendum victory', 'Nuclear standoff', 'London 'Terrorist' baby', and 'Portugal Five die in plane crash'.



Top News | Tech | Business | Politics | Science | Life | RSS | Twitter | FB | G+

## NS NEW SCIENTIST

- Entire nervous system of an animal recorded for
- Physics of shoelaces shows why they come undone
- Psychedelic drug ayahuasca improves hard-to-treat depression
- Start-up uses biometrics to tailor music for good
- Unprotected sex may disrupt the microbiome in vagina
- Saturn's flying saucer moon Atlas has a smooth
- Fast CRISPR test easily detects Zika and antibiotic

## BI BUSINESS INSIDER

- THE INTERNET OF THINGS 2017 REPORT: How the IoT is improving lives to transform the world
- The actor behind the 'Veep' fan favorite Richard explains what makes him so funny
- Another runway to LaGuardia won't alleviate the airport's notorious delays
- Blake Griffin explains why he thinks Russell Westbrook should win MVP, and it underscores how players view the game
- Trump suggests the media are favoring Democratic candidates in special elections
- These are the dress shirts that finally sold me on the idea of

## DI DIGG

- The Man Behind Iconic Movie Posters, From 'Breakfast At Tiffany's' To James Bond
- Princeton's Ad-Blocking Superweapon May Put An End To The Ad-Blocking Arms Race
- Uber Is Losing Historic Amounts Of Money
- This Mattress Company Is Changing The Game With 95% Sleeper Satisfaction
- Mapping The New Urban Crisis
- United Employees Can No Longer Displace Boarded Passengers

## CNN

- Turkey's president declares victory as unofficial results show voters approve reforms
- Erdogan: What you need to know
- Opinion: Turkey's democracy died today
- How Erdogan transformed Turkey
- McMaster: North Korea 'coming to a head'
- The moment Pence learned of missile test
- 'SNL' takes on Kushner, Spicer

## ME METANEWS

- Support metanews | shop at Amazon.com:
- macbooks on Amazon.com
- The top smartphones for 2016
- The latest HDTVs for 2016
- Have groceries delivered with amazon pantry
- Xbox One at Amazon
- New Amazon echo
- The GoPro HERO4

## ZEROHEDGE

- World's Biggest Aluminum Producer Faces Default, Warns Of "Dramatic Social Unrest" Without A Beijing Bailout
- Insider Roger Stone: "Trump Diplomacy Is Working... It's Really Working"
- China, Russia Dispatch Naval Vessels To Track USS Carl Vinson To Korean Peninsula
- \$43 Million In Cash Found In Empty Nigerian Apartment
- Who Holds The Power In Today's Oil Market?
- "Easter Day Slaughter": Manhunt For Active Cleveland Shooter Who Killed Man Live On Facebook, Reportedly Murdered 15
- Bond Bears Battered To 5-Month Lows But Rate-Hike Bets Top \$3.2 Trillion

www.flickr.com

<b>Name</b> XXXXXXXXXXXX	<b>Email address</b> XXXXXXXXXX@XXXXXX.com
<b>Product name or reason for key</b> XXXXXXXXXXXXXXXXXXXX	<b>Product URL (optional)</b> XXXXXXXXXXXXXXXXXXXX
<b>Company name (optional)</b> XXXXXXXXXXXXXXXXXXXX	<b>Company URL (optional)</b> XXXXXXXXXXXXXXXXXXXX
<input checked="" type="checkbox"/> I accept the Guardian Open Platform terms and conditions	
<a href="#">Register</a>	

Click here to enable desktop notifications for Gmail. [Learn more](#) [Hide](#)

Navigation icons: back, home, notifications, trash, folders, tags, more

New Key Created Inbox x

no-reply@open-platform.theguardian.com via amazonse.com 11:05 PM (1 hour ago) ☆

to me ▾

Hello from the Guardian.

Thank you for registering with the open platform.

A new key has been created for you: [REDACTED]

You can try this key by accessing [https://content.guardianapis.com/search?api-key=\[REDACTED\]](https://content.guardianapis.com/search?api-key=[REDACTED]) in your browser.

For more details on how to use the open platform API, check out the documentation available at <http://open-platform.theguardian.com/documentation/>

[Click here to Reply or Forward](#)

Thanks for trying the new version of the API Explorer. We'd love to hear feedback - [let us know what you think!](#)



e.g. 'football'

Search content ▾

Add filters...

Add API key...

Show All Filters Help Feedback

<http://content.guardianapis.com/search?api-key=test>

```
{
  - response: {
    status: "ok"
    userTier: "developer"
    total: 1944250
    startIndex: 1
    pageSize: 10
    currentPage: 1
    pages: 194425
    orderBy: "newest"
    - results: [
      - {
        id: "commentisfree/2017/apr/17/the-guardian-view-on-turkish-referendum-erdogan-entrenches-himself"
        type: "article"
        sectionId: "commentisfree"
        sectionName: "Opinion"
        webPublicationDate: "2017-04-17T17:44:01Z"
        webTitle: "The Guardian view on the Turkish referendum: Erdoğan entrenches himself | Editorial"
        webUrl: https://www.theguardian.com/commentisfree/2017/apr/17/the-guardian-view-on-turkish-referendum-erdogan-entrenches-himself
        apiUrl: https://content.guardianapis.com/commentisfree/2017/apr/17/the-guardian-view-on-turkish-referendum-erdogan-entrenches-himself
        isHosted: false
      }
    ]
  }
}
```

Thanks for trying the new version of the API Explorer. We'd love to hear feedback - [let us know what you think!](#)



brexit

Search content ▾

section

from-date

to-date

Add filters...

Show All Filters Help Feedback

<http://content.guardianapis.com/search?section=commentisfree&from-date=2016-06-01&to-date=2016-06-25&q=brexit&api-key=864b10a5-c6c8-4a6f-a375-0cc40b7da335>

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    startIndex: 1
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    currentPage: 1
    pages: 21
  }
}
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{
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    userTier: "developer"
    total: 587
    startIndex: 1
    pageSize: 10
    currentPage: 1
    pages: 59
    orderBy: "relevance"
    - results: [
      - {
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        type: "article"
        sectionId: "commentisfree"
        sectionName: "Opinion"
        webPublicationDate: "2016-06-21T17:31:19Z"
        webTitle: "How Brexit could damage our health | Christopher Birt"
        webUrl: https://www.theguardian.com/commentisfree/2016/jun/21/brexit-damage-health-drug-research-funding-free-treatment-europe
        apiUrl: https://content.guardianapis.com/commentisfree/2016/jun/21/brexit-damage-health-drug-research-funding-free-treatment-europe
        isHosted: false
      }
      - {
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        type: "article"
        sectionId: "commentisfree"
        sectionName: "Opinion"
        webPublicationDate: "2016-06-25T07:29:08Z"
      }
    ]
  }
}

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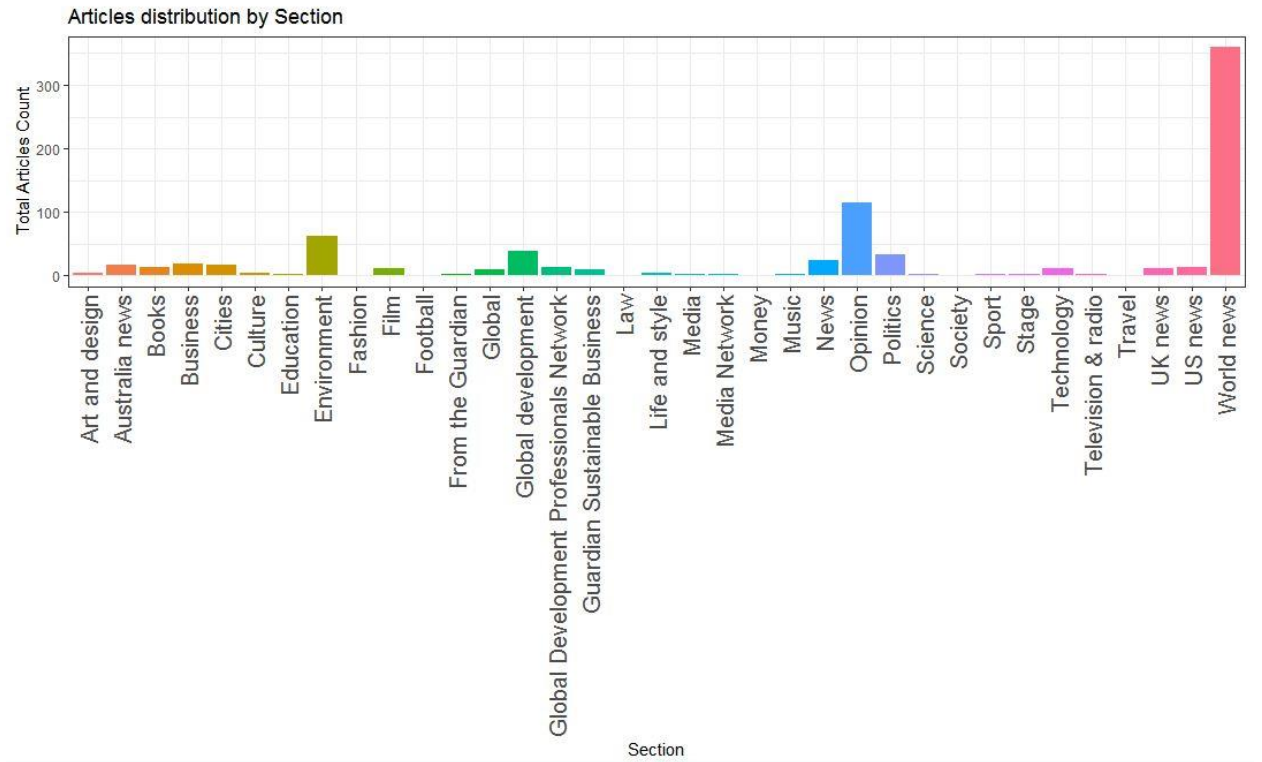
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1	https://www.theguardian.com/commentisfree/2016...	article	Opinion	How Brexit could damage our health   Christopher Birt	commentisfree
2	https://www.theguardian.com/commentisfree/2016...	article	Opinion	Why I will be leaving Brexit Britain   Oliver Imhof	commentisfree
3	https://www.theguardian.com/commentisfree/2016...	article	Opinion	Brexit stands as a warning to American conservatives	commentisfree
4	https://www.theguardian.com/commentisfree/2016...	article	Opinion	The dispossessed voted for Brexit. Jeremy Corbyn of...	commentisfree
5	https://www.theguardian.com/commentisfree/2016...	article	Opinion	The leftwing case for Brexit (one day)	commentisfree
6	https://www.theguardian.com/commentisfree/2016...	article	Opinion	A Brexit won't stop cheap labour coming to Britain   L...	commentisfree
7	https://www.theguardian.com/commentisfree/2016...	article	Opinion	Brexit supporters have unleashed furies even they c...	commentisfree
8	https://www.theguardian.com/commentisfree/2016...	article	Opinion	Brexit could start a disastrous EU drift to the east   An...	commentisfree
9	https://www.theguardian.com/commentisfree/2016...	article	Opinion	My advice to Brexit battlers: forget Hitler, think Welli...	commentisfree

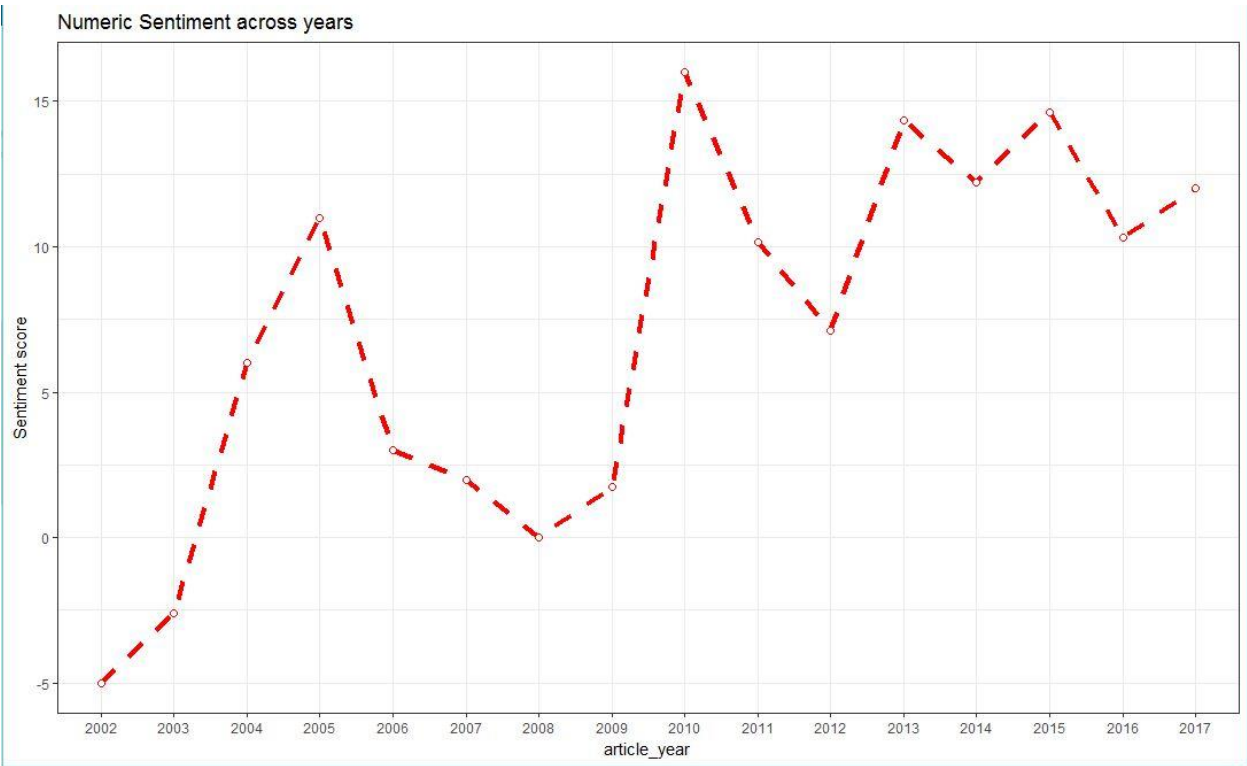
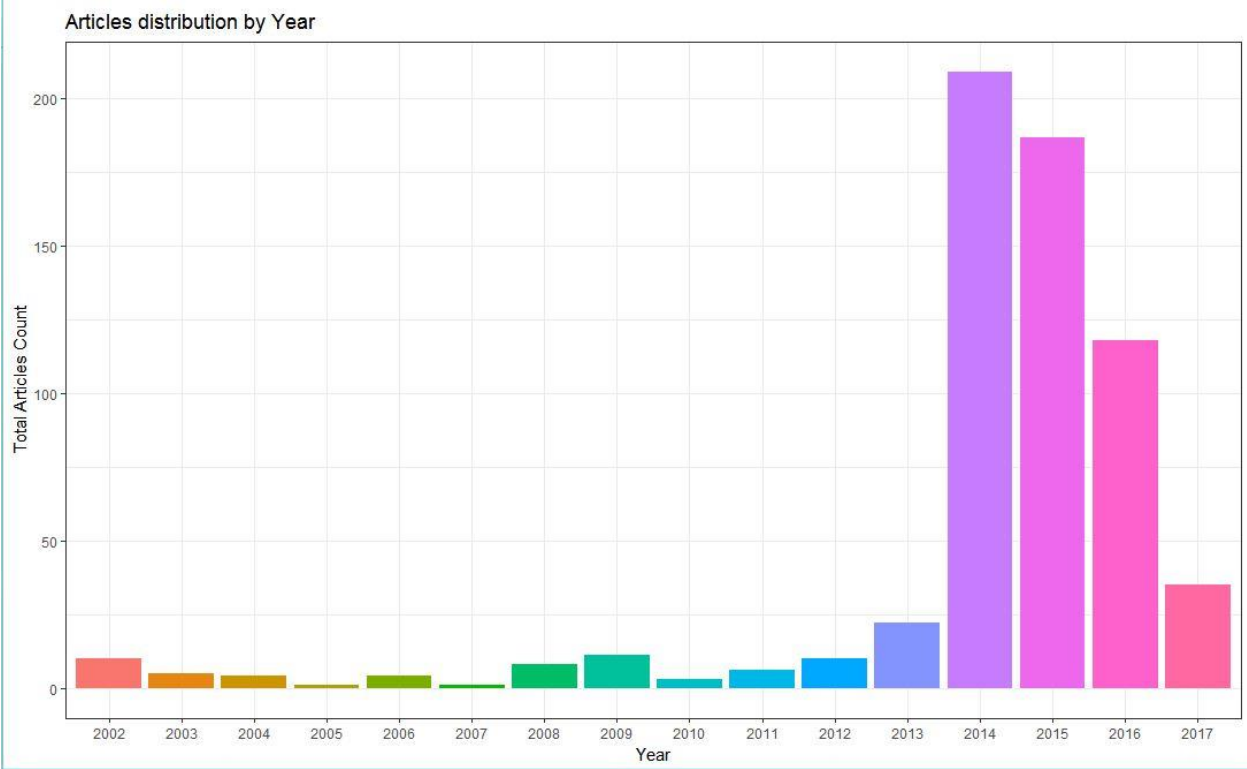
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4 <head>
5 <meta charset="utf-8"/>
6 <!--
7
8
9
10
11
12
13 Ever thought about joining us?
14 http://developers.theguardian.com/join-the-team.html
15 -->
16 <title>How Brexit could damage our health | Christopher Birt | Opinion | The Guardian</title>
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18 <meta name="format-detection" content="telephone=no"/>
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20 <meta name="viewport" content="width=device-width,minimum-scale=1,initial-scale=1">
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22 <link rel="dns-prefetch" href="https://i.guim.co.uk/">
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24 <link rel="dns-prefetch" href="https://hits-secure.theguardian.com/">
25 <link rel="dns-prefetch" href="//j.ophan.co.uk/">
26 <link rel="dns-prefetch" href="//ophan.theguardian.com/">
27 <link rel="dns-prefetch" href="//beacon.gu-web.net/">
28 <link rel="dns-prefetch" href="//www.google-analytics.com/">
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38 <link rel="shortcut icon" type="image/png" href="https://assets.guim.co.uk/images/favicons/79d7ab5a729562cebca9c6a13c24f0e/32x32.ico"/>
39 <link rel="canonical" href="https://www.theguardian.com/commentisfree/2016/jun/21/brexit-damage-health-drug-research-funding-free-treatment-
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</time>
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</div>
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<p><span class="drop-cap"><span class="drop-cap_inner">M</span></span></span><span>uch of the EU debate is conducted at the level of insults and unsupported claims and assertions. But, if we
care to look, there are many areas where it is not difficult to identify the effects of Brexit. <a href="https://www.theguardian.com/society/health" data-link-name="auto-linked-tag"
data-component="auto-linked-tag" class="u-underline">Health</a> and health services are one such area - and Brexit could be devastating.</p>
<p>European health insurance cards, which have for many years guaranteed emergency treatment for Britons wherever they are in the EU would of course disappear in case of Brexit -
leaving the UK government to negotiate new arrangements with each individual country. While this is widely known, the right of EU citizens to undergo any kind of healthcare anywhere
in the EU is perhaps less familiar - possibly because it is the result of much more recent EU legislation. It is now not unusual for UK residents to choose to have hip replacements in
France, or to travel to Belgium for spectacles, or to Budapest for dental treatment, all paid for (as according to EU legislation) by the local UK "purchaser".</p>
<p>Of course the <a href="http://www.bbc.co.uk/news/uk-politics-eu-referendum-36046900" title="" data-link-name="in body link" class="u-underline">1.2 million Brits</a> living in
other EU countries - including around 300,000 in Spain - rely on these facilities. And we should not forget this freedom of movement works both ways - to our benefit. It is thanks to
an <a href="https://www.theguardian.com/society/2016/jun/14/brexit-nhs-health-social-care-disabled-people-eu-referendum" title="" data-link-name="in body link" class="u-
underline">influx of medical professionals from around the EU</a> that the NHS and care services are able to continue to operate at such a high standard. Would all these vital health
care workers suddenly no longer be welcome?</p>
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<div class="rich-link_header">
<h1 class="rich-link_title">What would Brexit mean for the NHS, social care and disabled people? | Denis Campbell, David Brindle and Patrick Butler</h1>
</div>
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> content  
[1] "Tuesday 21 June 2016 18.31 BST Last modified on Friday 17 February 2017 11.53 GMT Much of the EU debate is conduct ed at the level of insults and unsupported claims and assertions. But, if we care to look, there are many areas where it is not difficult to identify the effects of Brexit. Health and health services are one such area - and Brexit could be devastating. European health insurance cards, which have for many years guaranteed emergency treatment for Britons wherever they are in the EU would of course disappear in case of Brexit - leaving the UK government to negotiate new arrangements with each individual country. While this is widely known, the right of EU citizens to undergo any kind of healthcare anywhere in the EU is perhaps less familiar - possibly because it is the result of much more recent EU leg islation. It is now not unusual for UK residents to choose to have hip replacements in France, or to travel to Belgium for spectacles, or to Budapest for dental treatment, al... <truncated>

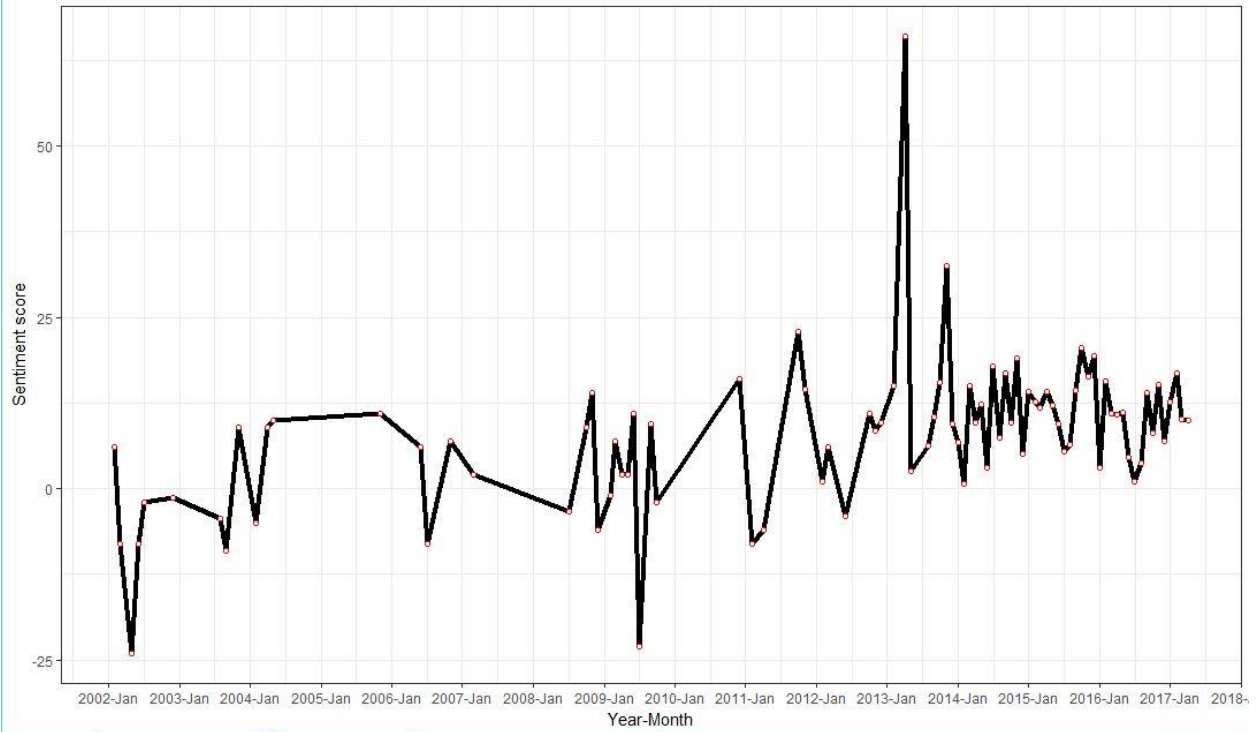
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gallery	Art and design	Photo highlights of the day	artanddesign	The Guardian's picture editors bring you a select...	8 May 2014
gallery	Art and design	The 20 photographs of the week	artanddesign	Jim Powell Saturday 24 May 2014 13.27 BSTFirst pu...	24 May 2014
article	Art and design	Sydney Biennale 2016: Belgiorno-Nettis family may b...	artanddesign	Chairman Phillip Keir is hopeful Belgiorno-Nettis famil...	2 December 2014
article	Art and design	Buddha statue found to have been stolen will be ret...	artanddesign	Kushan Buddha statue, dating from second century, ...	4 January 2015
article	Australia news	Australian coalmining is entering "structural decli...	australia-news	Demand from India and China predicted to falter due ...	5 May 2014
article	Australia news	David Cameron, Narendra Modi and Xi Jinping to addr...	australia-news	Leaders of Britain, China and India will speak to parlia...	14 October 2014
liveblog	Australia news	Clashes over education, GST and petrol "as it hap...	australia-news	Senate to consider second tranche of national secur...	28 October 2014
liveblog	Australia news	G20: David Cameron addresses Australian parliament ...	australia-news	British prime minister outlines plans to counter extre...	14 November 2014



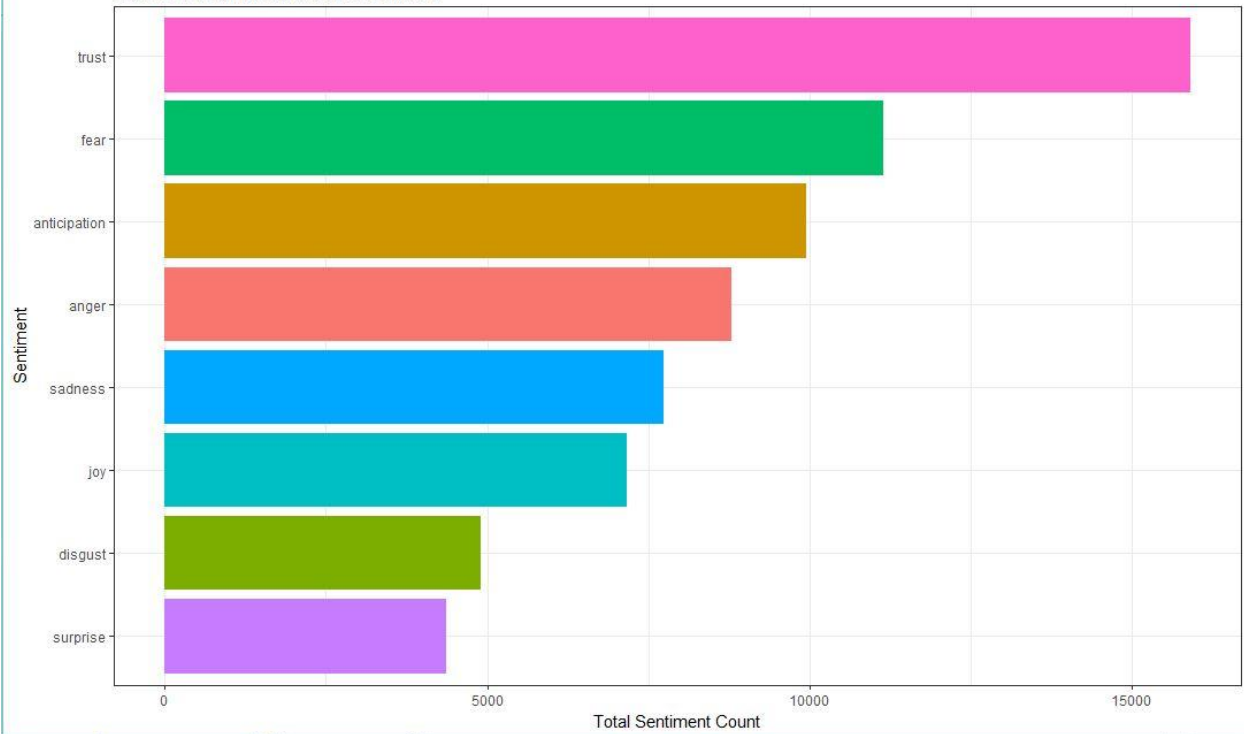




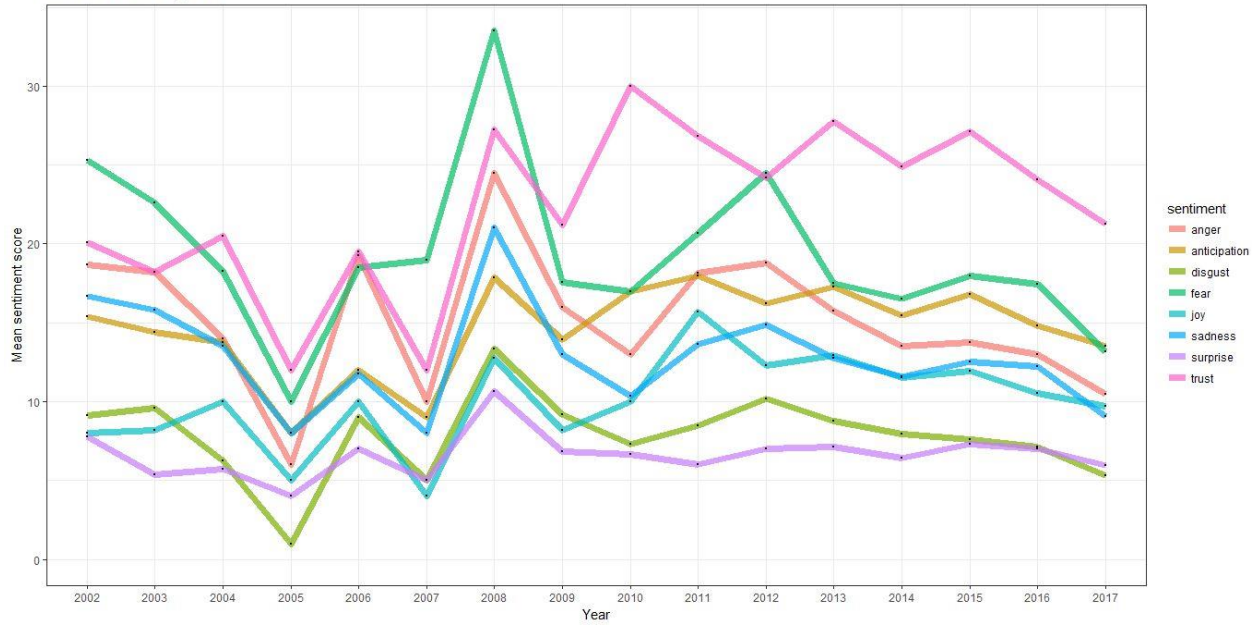
Numeric Sentiment across years broken by months



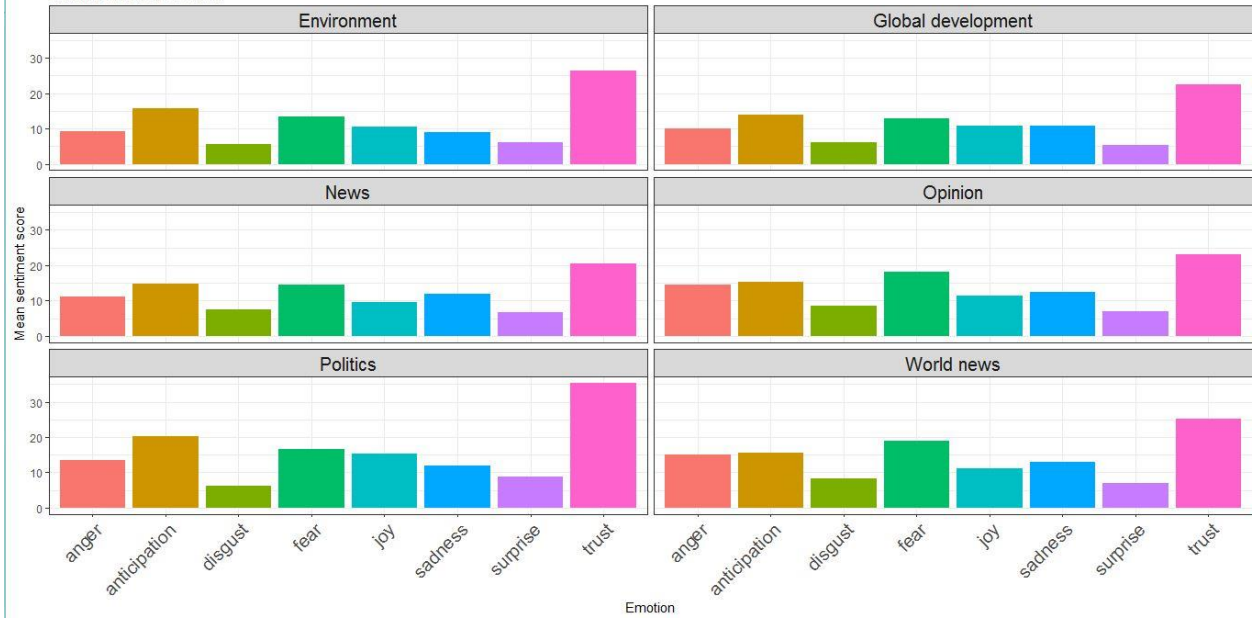
Overall sentiment across all articles



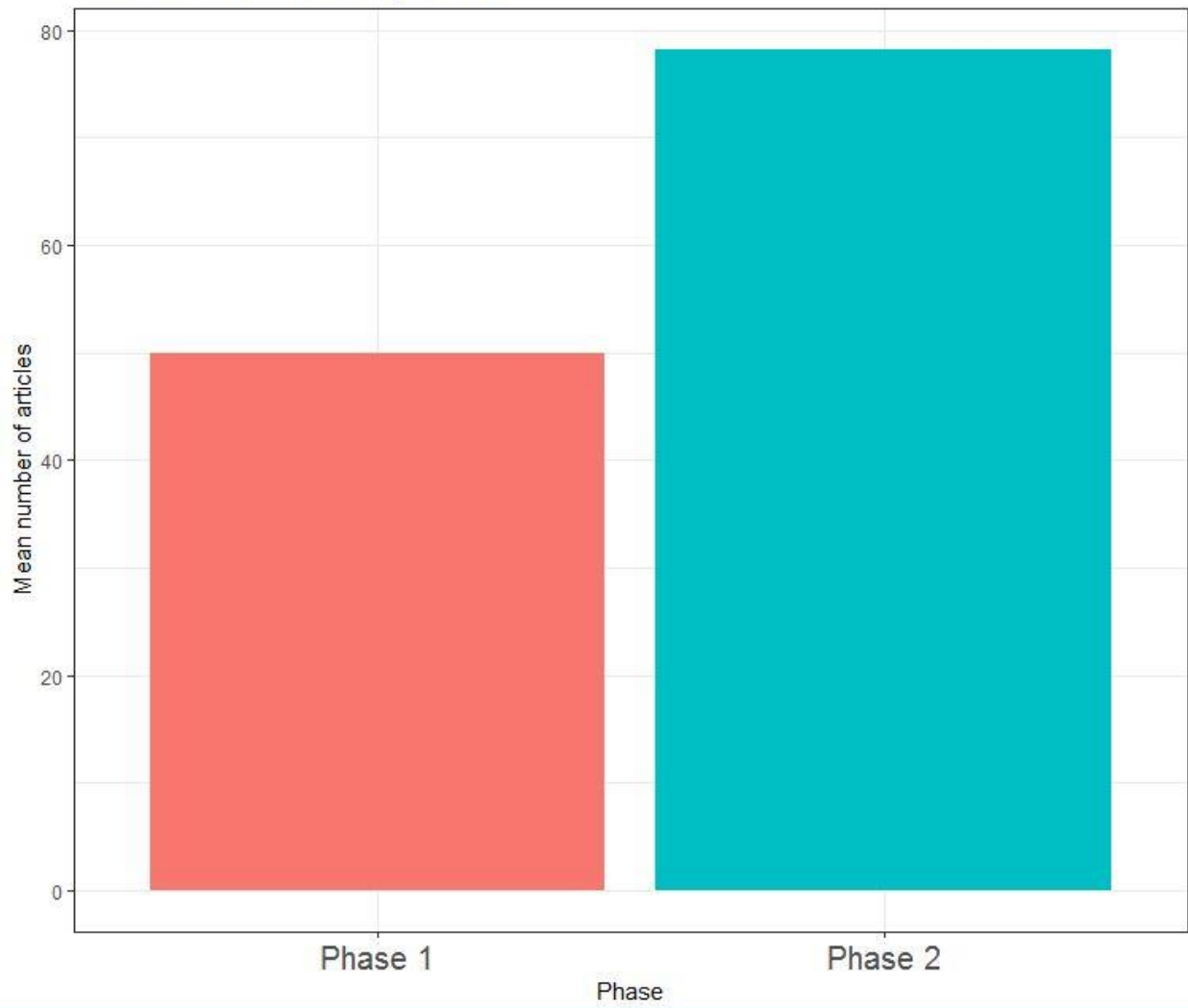
Sentiment across years



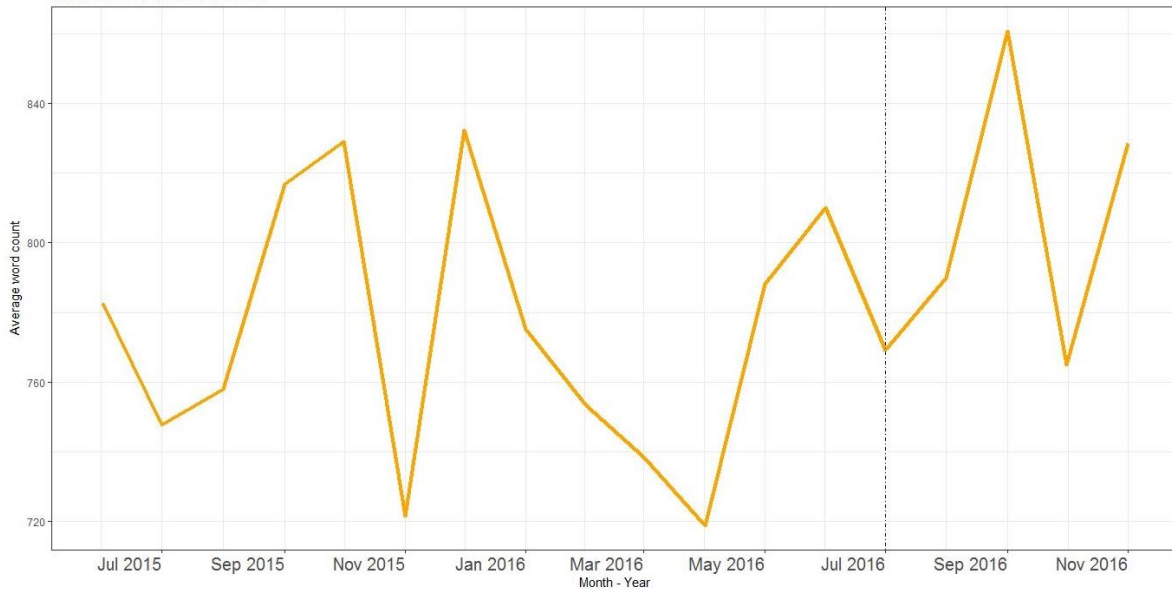
Emotion across Section



Total article count across phases



Word count across the time line



	Topic 1	Topic 2	Topic 3	Topic 4	Topic 5
[1,]	"like"	"trump"	"women"	"polit"	"american"
[2,]	"trump"	"republican"	"year"	"will"	"muslim"
[3,]	"itÅ"	"candid"	"time"	"vote"	"right"
[4,]	"say"	"clinton"	"one"	"govern"	"black"
[5,]	"peopl"	"parti"	"work"	"chang"	"peopl"
[6,]	"just"	"presid"	"life"	"one"	"war"
[7,]	"can"	"campaign"	"men"	"right"	"america"
[8,]	"thing"	"will"	"new"	"leav"	"attack"
[9,]	"get"	"democrat"	"home"	"labour"	"immigr"
[10,]	"know"	"polit"	"itÅ"	"world"	"white"

	Topic 1	Topic 2	Topic 3	Topic 4	Topic 5
[1,]	"polit"	"year"	"trump"	"women"	"can"
[2,]	"peopl"	"new"	"clinton"	"itÅ"	"peopl"
[3,]	"will"	"one"	"elect"	"even"	"one"
[4,]	"right"	"also"	"republican"	"just"	"think"
[5,]	"brexit"	"last"	"campaign"	"trump"	"like"
[6,]	"now"	"will"	"american"	"said"	"get"
[7,]	"parti"	"system"	"presid"	"like"	"week"
[8,]	"left"	"report"	"trumpÅ"	"say"	"good"
[9,]	"countri"	"call"	"donald"	"donÅ"	"just"
[10,]	"econom"	"tax"	"vote"	"right"	"time"

"More than 200,000 homes in England with a total value of £43bn were empty for at least six months during 2016 despite the desperate shortage of properties to rent and buy. \r\nAccording to official figures, Birmingham was the worst affected city outside London with 4,397 empty homes worth an estimated £956m, followed by Bradford and Liverpool.\r\nThe wealthy borough of Kensington and Chelsea was the worst performer in London as super-rich owners rejected renting them out or selling up in favour of leaving their properties lying idle.\r\nThe royal borough had 1,399 empty homes worth £664m, compared with second-placed Croydon, which had 1,216 empty homes worth £577m.\r\nAcross London

	docid	sentenceld	sentence	value
1	13	13_1	Property investment firm Property Partner, which collate...	0.12858215
2	3	3_1	The wealthy borough of Kensington and Chelsea was th...	0.10947000
3	10	10_1	While Birmingham recorded a 13% jump in empty prope...	0.10889354
4	7	7_1	Councils and the government have worked to cut the n...	0.08571688
5	17	17_1	Property Partner said a large drop in the number of emp...	0.08490843