

rtweet

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Twitter Fundamentals

- 'microblogging' website: users can create, share, and respond to posts that are a maximum of 280 characters long
- twitter automatically generates 'trends' based on location, via an algorithm
- some definitions:
 1. feed: stream of tweets on your homepage
 2. follows: followed users' tweets and re-tweets appear in your feed
 3. hashtag: user-created tweet/topic identifier
- rtweet communicates with twitter's REST api so you dont have to!

Package Features

- Search tweets: `search_tweets()` - up to 18,000 from the past 6-9 days
- Search Users: `search_users()`
- Search trends by location: `get_trends("location")`
- Use and visualize as a time series: `ts_plot()` and `ts_data()`
- Get followers/following: `get_friends()` and `get_followers()`
- Get recent tweets: `get_timeline()`
- Get favorites: `get_favorites()`
- Live stream tweets: `stream_tweets()` with options:
 1. random sampling
 2. filtering by content (e.g. by hashtag)
 3. by location: `lookup_coords()` (requires google API key)
 4. tracking by user id
- and many more!

Installation and Usage

Basic functionality requires a twitter account and the 'httpuv' package: running an rtweet function in a live session of RStudio will prompt a browser popup to authorize the embedded 'rstats2twitter' app.

For full functionality (posting tweets etc.) one must apply for a twitter developer account and create a user app. See <https://rtweet.info/articles/auth.html>.

Examples

```
## search for 18000 tweets using the rstats hashtag
```

```
## excludes retweets
```

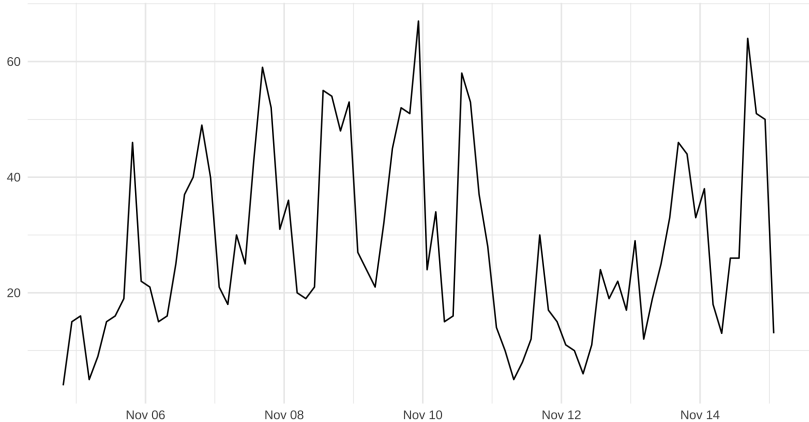
```
rt <- search_tweets(  
  "#rstats", n = 18000, include_rts = FALSE  
)
```

```
## plot time series of tweets
```

```
rt %>%  
  ts_plot("3 hours") +  
  ggplot2::theme_minimal() +  
  ggplot2::theme(plot.title = ggplot2::element_text(face =  
  ggplot2::labs(  
    x = NULL, y = NULL,  
    title = "Frequency of #rstats Twitter statuses from pas  
    subtitle = "Twitter status (tweet) counts aggregated us
```

Frequency of #rstats Twitter statuses from past 9 days

Twitter status (tweet) counts aggregated using three-hour intervals



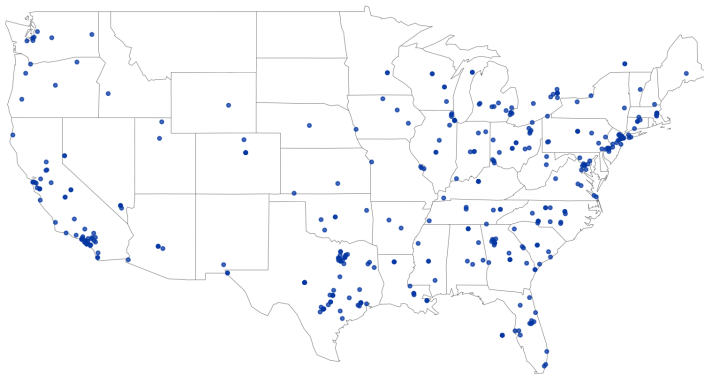
Source: Data collected from Twitter's REST API via rtweet

```
## search for 10,000 tweets sent from the US
rt <- search_tweets(
  "lang:en", geocode = lookup_coords("usa"), n = 10000
)

## create lat/lng variables using all available tweet and
rt <- lat_lng(rt)

## plot state boundaries
par(mar = c(0, 0, 0, 0))
maps::map("state", lwd = .25)

## plot lat and lng points onto state map
with(rt, points(lng, lat, pch = 20, cex = .75, col = rgb(0,
```



Kearney MW (2019). “rtweet: Collecting and analyzing Twitter data.” *Journal of Open Source Software*, 4(42), 1829. doi: 10.21105/joss.01829, R package version 0.7.0, <https://joss.theoj.org/papers/10.21105/joss.01829>.

- <https://github.com/ropensci/rtweet>