# Package 'tfse'

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Title twitter follows & selective exposure
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<b>Description</b> this package contains R code used in my dissertation research most of the functions are designed to interact with twitter's API. this repository will one day be organized into more useful replication materials. until then, it's is a work in progress.
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## R topics documented:

Imports httr, jsonlite, dplyr

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### Description

check\_rate\_limit

### Usage

```
check_rate_limit(type, token, seconds = FALSE)
```

### **Arguments**

type If not missing, which returns entire rate limit request object, type returns spe-

cific values; e.g., type = "lookup" returns remaining limit for user lookup requests; type = "followers" returns remaining limit for follower id requests;

type = "friends" returns remaining limit for friend id requests.

token An OAuth token (1.0 or 2.0)

seconds logical, indicating whether to return unix seconds

### Value

response Rate limit response object or specific value of remaining requests

### See Also

See https://dev.twitter.com/overview/documentation for more information on using Twitter's API.

data\_frame\_lookup data\_frame\_lookup

#### **Description**

```
data_frame_lookup
```

#### Usage

```
data_frame_lookup(x)
```

### **Arguments**

x json resposne object from user lookup Twitter API call.

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#### Value

data frame

#### See Also

See <a href="https://dev.twitter.com/overview/documentation">https://dev.twitter.com/overview/documentation</a> for more information on using Twitter's API.

get\_api

 $get\_api$ 

### Description

get\_api

#### Usage

```
get_api(url, token = NULL)
```

### Arguments

url

API url address.

### Value

Response formatted as nested list. Assumes response object is json object.

get\_followers

get\_followers

### Description

get\_followers

#### Usage

```
get_followers(user, token, page = "-1", stringify = TRUE)
```

### **Arguments**

user Screen name or user id of target user.

token OAuth token (1.0 or 2.0)

page Default page = -1 specifies first page of json results. Other pages specified via

cursor values supplied by Twitter API response object.

stringify logical, indicating whether to return user ids as strings (some ids are too long to

be read as numeric). Defaults to TRUE

### Value

user ids

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#### See Also

See https://dev.twitter.com/overview/documentation for more information on using Twitter's API.

get\_followerslist

get\_followerslist

### **Description**

Returns a cursored collection of user objects for users following the specified user.

### Usage

```
get_followerslist(user, token, page = "-1")
```

### **Arguments**

user Screen name or user id of target user.

token OAuth token (1.0 or 2.0)

page Default page = -1 specifies first page of json results. Other pages specified via

cursor values supplied by Twitter API response object.

#### Value

json user object (nested list)

#### See Also

```
See https://api.twitter.com/1.1/followers/list.json.
```

get\_followers\_max

get\_followers\_max

### **Description**

```
get_followers_max
```

### Usage

```
get_followers_max(user, tokens)
```

### Arguments

user Screen name or user id of target user

tokens OAuth tokens (1.0 or 2.0)

### Value

user ids

get\_friends 5

#### See Also

See https://dev.twitter.com/overview/documentation for more information on using Twitter's API.

	get_friends	get_friends
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### **Description**

get\_friends

### Usage

```
get_friends(user, token, page = "-1", stringify = TRUE)
```

#### **Arguments**

user Screen name or user id of target user.

token OAuth token (1.0 or 2.0)

page Default page = -1 specifies first page of json results. Other pages specified via

cursor values supplied by Twitter API response object.

stringify logical, indicating whether to return user ids as strings (some ids are too long to

be read as numeric). Defaults to TRUE

#### Value

friends User ids for everyone a user follows.

### See Also

See https://dev.twitter.com/overview/documentation for more information on using Twitter's API.

### **Description**

Returns detailed information about the relationship between two arbitrary users.

Returns a collection of the most recent Tweets posted by the user indicated by the screen\_name or user\_id parameters. User timelines belonging to protected users may only be requested when the authenticated user either "owns" the timeline or is an approved follower of the owner. The timeline returned is the equivalent of the one seen when you view a user's profile on twitter.com. This method can only return up to 3,200 of a user's most recent Tweets. Native retweets of other statuses by the user is included in this total, regardless of whether include\_rts is set to false when requesting this resource.

6 get\_friendships

#### **Usage**

```
get_friendships(user, since_id = NULL, count = NULL, max_id = NULL,
    trim_user = NULL, exclude_replies = NULL, contributer_details = NULL,
    include_rts = NULL, token)

get_friendships(user, since_id = NULL, count = NULL, max_id = NULL,
    trim_user = NULL, exclude_replies = NULL, contributer_details = NULL,
    include_rts = NULL, token)
```

### **Arguments**

user The screen\_name or ID of the user for whom to return results for.

since\_id Returns results with an ID greater than (that is, more recent than) the specified

ID. There are limits to the number of Tweets which can be accessed through the API. If the limit of Tweets has occured since the since\_id, the since\_id will be

forced to the oldest ID available.

count Specifies the number of tweets to try and retrieve, up to a maximum of 200 per

distinct request. The value of count is best thought of as a limit to the number of tweets to return because suspended or deleted content is removed after the count has been applied. We include retweets in the count, even if include\_rts is not supplied. It is recommended you always send include\_rts=1 when using this

API method.

max\_id Returns results with an ID less than (that is, older than) or equal to the specified

ID.

trim\_user When set to either true, t or 1, each tweet returned in a timeline will include a

user object including only the status authors numerical ID. Omit this parameter

to receive the complete user object.

exclude\_replies

This parameter will prevent replies from appearing in the returned timeline. Using exclude\_replies with the count parameter will mean you will receive up-to count tweets — this is because the count parameter retrieves that many tweets before filtering out retweets and replies. This parameter is only supported for

JSON and XML responses.

include\_rts When set to false, the timeline will strip any native retweets (though they will

still count toward both the maximal length of the timeline and the slice selected by the count parameter). Note: If you're using the trim\_user parameter in conjunction with include\_rts, the retweets will still contain a full user object.

token OAuth token (1.0 or 2.0)

source Screen name or user id of source user.
target Screen name or user id of target user.

contributor\_details

This parameter enhances the contributors element of the status response to include the screen\_name of the contributor. By default only the user\_id of the

contributor is included.

token OAuth token (1.0 or 2.0)

#### Value

json object (nested list) json object (nested list) get\_friendslist 7

#### See Also

```
See https://api.twitter.com/1.1/friendships/show.json.
See https://api.twitter.com/1.1/statuses/user_timeline.json.
```

get\_friendslist

get\_friendslist

### **Description**

Returns a cursored collection of user objects for every user the specified user is following (otherwise known as their "friends").

### Usage

```
get_friendslist(user, token, page = "-1")
```

### Arguments

user Screen name or user id of target user.

token OAuth token (1.0 or 2.0)

page Default page = -1 specifies first page of json results. Other pages specified via

cursor values supplied by Twitter API response object.

#### Value

```
json user object (nested list)
```

#### See Also

```
See https://api.twitter.com/1.1/friends/list.json.
```

get\_friends\_max

get\_friends\_max

### Description

```
get_friends_max
```

### Usage

```
get_friends_max(user_ids, tokens, start = 1, stringify = TRUE,
  verbose = TRUE)
```

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#### **Arguments**

user\_ids Data frame with column name "screen\_name"

tokens OAuth tokens (1.0 or 2.0) start Starting value (nth user id)

stringify logical, indicating whether to return user ids as strings

verbose default behavior verbose = TRUE prints asterisk for every 15 (or max of one

token) user networks collected. Set verbose = FALSE to run function silently.

(some ids are too long to be read as numeric). Defaults to TRUE.

#### Value

friends List of user ids each user follows.

#### See Also

See https://dev.twitter.com/overview/documentation for more information on using Twitter's API.

get\_list get\_list

### **Description**

get\_list

#### Usage

```
get_list(slug, owner, token, count = 5000, cursor = "-1")
```

### **Arguments**

slug Name of Twitter list
owner Screen name of list owner
token An OAuth token (1.0 or 2.0)

count Maximum number of users to return (cannot be higher than 5000).

cursor Select next or previous page or results using cursor value from returned json

object

### Value

json response object as nested list

#### See Also

get\_lookup 9

get\_lookup

get\_lookup

### Description

```
get_lookup
```

### Usage

```
get_lookup(users, token, df = TRUE, skip = TRUE, entities = FALSE)
```

### Arguments

users Screen name or user id of target users.

token OAuth tokens (1.0 or 2.0)

df logical, indicating whether to format response as data frame

### Value

response object

#### See Also

See https://dev.twitter.com/overview/documentation for more information on using Twitter's API.

get\_lookup\_max

get\_lookup\_max

### **Description**

```
get_lookup_max
```

### Usage

```
get_lookup_max(ids, tokens, start = 1)
```

### Arguments

ids User id or screen name of target user.

tokens (1.0 or 2.0)

start First (nth) id

### Value

response object

#### See Also

10 get\_statuses\_retweets

get_package_pdf	get_package_pdf
0	

### Description

```
get_package_pdf
```

#### Usage

```
get_package_pdf(package, update = FALSE, open = TRUE)
```

### **Arguments**

package Name of target package.

update logical, indicating whether to replace old manual

open logical, indicating whether to automatically view preview of pdf

```
get_statuses_retweets get_statuses_retweets
```

### **Description**

Returns a collection of the 100 most recent retweets of the tweet specified by the id parameter.

### Usage

```
get_statuses_retweets(tweet_id, count = 100, trim_user = TRUE, token)
```

### **Arguments**

tweet\_id required, The numerical ID of the desired status

count optional, Specifies the number of records to retrieve. Must be less than or equal

to 100.

trim\_user optional, When set to TRUE each tweet returned in a timeline will include a

user object including only the status authors numerical ID. Omit this parameter

to receive the complete user object.

token OAuth token (1.0 or 2.0)

### Value

json object

#### See Also

```
https://api.twitter.com/1.1/statuses/retweets/:id.json
```

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get\_token

get\_token

### Description

get\_token

### Usage

```
get_token(app, consumer_key, consumer_secret)
```

### **Arguments**

app Name of user created Twitter application

consumer\_key Application API key

consumer\_secret

Application API secret User-owned app must have Read and write access level and Callback URL of http://127.0.0.1:1410.

### Value

twitter oauth 1.0 token

### See Also

See https://dev.twitter.com/overview/documentation for more information on using Twitter's API.

get\_wave

get\_wave

### **Description**

get\_wave

### Usage

```
get_wave(ids, tokens)
```

### **Arguments**

ids

Vector of user ids

#### Value

friends List of user ids each user follows.

#### See Also

load\_tokens

get\_wave\_data

get\_wave\_data

### Description

```
get_wave_data
```

### Usage

```
get_wave_data(wave, ids, tokens)
```

### Arguments

wave

Wave number

### Value

data Saved wave data and updated running data set

is\_screen\_name

is\_screen\_name

### Description

```
is_screen_name
```

### Usage

```
is_screen_name(x)
```

### Arguments

Χ

Twitter user id or screen name

### Value

logical value indicating whether object is screen name [or user ID]

load\_tokens

load\_tokens

### Description

load\_tokens

### Usage

load\_tokens()

#### Value

twitter oauth 1.0 tokens

search\_tweets 13

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---------------------

#### **Description**

Returns a collection of relevant Tweets matching a specified query. Please note that Twitter's search service and, by extension, the Search API is not meant to be an exhaustive source of Tweets. Not all Tweets will be indexed or made available via the search interface. In API v1.1, the response format of the Search API has been improved to return Tweet objects more similar to the objects you'll find across the REST API and platform. However, perspectival attributes (fields that pertain to the perspective of the authenticating user) are not currently supported on this endpoint. To learn how to use Twitter Search effectively, consult our guide to Using the Twitter Search API. See Working with Timelines to learn best practices for navigating results by since\_id and max\_id.

#### Usage

```
search_tweets(q, geocode = NULL, lang = NULL, locale = NULL,
  result_type = "mixed", count = 100, until = NULL, since_id = NULL,
  max_id = NULL, include_entities = TRUE, token)
```

### **Arguments**

q	required, A UTF-8, URL-encoded search query of 500 characters maximum, including operators. Queries may additionally be limited by complexity.
geocode	optional, Returns tweets by users located within a given radius of the given latitude/longitude. The location is preferentially taking from the Geotagging API, but will fall back to their Twitter profile. The parameter value is specified by "latitude,longitude,radius", where radius units must be specified as either "mi" (miles) or "km" (kilometers). Note that you cannot use the near operator via the API to geocode arbitrary locations; however you can use this geocode parameter to search near geocodes directly. A maximum of 1,000 distinct "subregions" will be considered when using the radius modifier.
lang	optional, Restricts tweets to the given language, given by an ISO 639-1 code. Language detection is best-effort.
locale	optional, Specify the language of the query you are sending (only ja is currently effective). This is intended for language-specific consumers and the default should work in the majority of cases.
result_type	optional, Specifies what type of search results you would prefer to receive. The current default is "mixed." Valid values include "mixed" to include both popular and real time results in the response, "recent" to return only the most recent results in the response, and "popular" to return only the most popular results in the response.
count	optional, The number of tweets to return per page, up to a maximum of 100. Defaults to 15. This was formerly the "rpp" parameter in the old Search API.
until	optional, Returns tweets created before the given date. Date should be formatted

Values: "2015-07-19".

as YYYY-MM-DD. Keep in mind that the search index has a 7-day limit. In other words, no tweets will be found for a date older than one week. Example

14 sn2id

since\_id optional, Returns results with an ID greater than (that is, more recent than)

the specified ID. There are limits to the number of Tweets which can be accessed through the API. If the limit of Tweets has occured since the since\_id,

the since\_id will be forced to the oldest ID available.

max\_id optional, Returns results with an ID less than (that is, older than) or equal to the

specified ID.

include\_entities

optional, The entities node will be disincluded when set to false.

token OAuth token (1.0 or 2.0)

callback optional, If supplied, the response will use the JSONP format with a callback

of the given name. The usefulness of this parameter is somewhat diminished by the requirement of authentication for requests to this endpoint. Example Values:

"processTweets"

#### Value

json object

#### See Also

https://api.twitter.com/1.1/search/tweets.json

sn2id sn2id

### Description

sn2id

### Usage

sn2id(screen\_name)

#### **Arguments**

screen\_name Twitter handle

### Value

response Twitter account user id

#### See Also

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TWIT TWIT

#### **Description**

**TWIT** 

### Usage

```
TWIT(query, parameters, token, version = "1.1")
```

#### **Arguments**

query Twitter API request type string. e.g, "friends/ids" calls Twitter API to return

information about a user's friend network (i.e., accounts followed by a user).

parameters Additional parameters passed along to API call

token An OAuth token (1.0 or 2.0)

#### Value

json response object as nested list

#### See Also

See https://dev.twitter.com/overview/documentation for more information on using Twitter's API.

which\_ids

which\_ids

### Description

Returns integer values. Used for get\_friends function.

#### Usage

```
which_ids(n, max_users = 3000, token = NULL)
```

### Arguments

n starting number for users

max\_users max number of user ids (if rate limit exceeds remaining number of users, this

sets upper ceiling and reduces likelihood of API request errors)

token Specify token if there is reason to believe current remaning friend list request is

below the rate limit max of 15. This rate limit resets every 15 minutes, so this is usually not necessary. Checking rate limits does not reduce the number of

available requests, but it does slow things down.

#### Value

integers used to identify 15 (or token max given rate limits) users from provided list of user ids

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