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Senior-Project-Subtweets / development / Subtweets Downloader.md

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 segalgouldn Markdown fixes.

f46f7c4 an hour ago

1 contributor

84 lines (61 sloc) | 2.73 KB

## Script for downloading a ground truth subtweets dataset

### Import libraries for accessing the API and managing JSON data

```
import tweepy
import json
```

### Load the API credentials

```
consumer_key, consumer_secret, access_token, access_token_secret = (open("../credentials.txt")
                                                                    .read().split("\n"))
```

### Authenticate the connection to the API using the credentials

```
auth = tweepy.OAuthHandler(consumer_key, consumer_secret)
auth.set_access_token(access_token, access_token_secret)
```

### Connect to the API

```
api = tweepy.API(auth, wait_on_rate_limit=True, wait_on_rate_limit_notify=True, compression=True)
```

### Define a function for recursively accessing parent tweets

```
def first_tweet(tweet_status_object):
    try:
        return first_tweet(api.get_status(tweet_status_object.in_reply_to_status_id_str, tweet_mode="extended"))
    except tweepy.TweepError:
        return tweet_status_object
```

### Define a function for finding tweets with replies that specifically do call them subtweets

```
def get_subtweets(max_tweets=10000000,
                  query=("subtweet AND @ since:2018-03-01 exclude:retweets filter:replies")):
    subtweets_ids_list = []
    subtweets_list = []
    i = 0
    for potential_subtweet_reply in tweepy.Cursor(api.search, lang="en",
                                                  tweet_mode="extended", q=query).items(max_tweets):
        i += 1
        potential_subtweet_original = first_tweet(potential_subtweet_reply)
        if (not potential_subtweet_original.in_reply_to_status_id_str
            and potential_subtweet_original.user.lang == "en"):
            if (potential_subtweet_original.id_str in subtweets_ids_list
                or "subtweet" in potential_subtweet_original.full_text
                or "Subtweet" in potential_subtweet_original.full_text
```

```

        or "SUBTWEET" in potential_subtweet_original.full_text):
            continue
    else:
        subtweets_ids_list.append(potential_subtweet_original.id_str)
        subtweets_list.append({"tweet_data": potential_subtweet_original._json,
                               "reply": potential_subtweet_reply._json})
    with open("../data/other_data/subtweets.json", "w") as outfile:
        json.dump(subtweets_list, outfile, indent=4)
    print(("Tweet #{0} was a reply to a subtweet: {1}\n"
          .format(i, potential_subtweet_original.full_text.replace("\n", " "))))
return subtweets_list

```

### Show the results

```

subtweets_list = get_subtweets()
print("Total: {}".format(len(subtweets_list)))

```