

What can CATS bring to researchers who want to analyze tweets?

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Why use Twitter?

- Major source of textual information
- Everything is available via the API
- Variety of associated meta-data

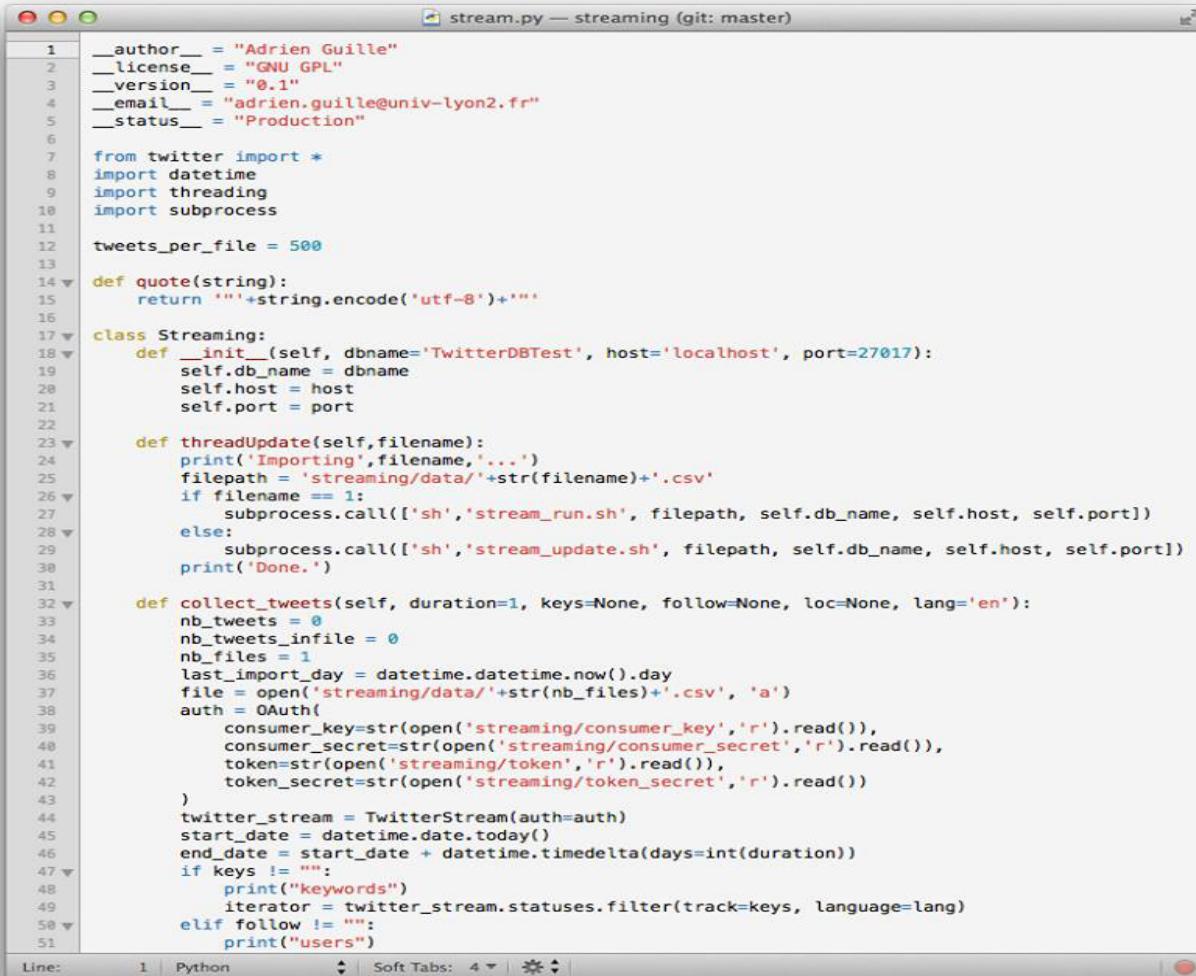
What is CATS?



What is CATS?

- A web interface hosted in Lyon 2
- Provides a way to easily collect tweets and provide analysis tools
- CATS = Collection and Analysis of Tweets made Simple

Why is there a need for CATS?



The screenshot shows a terminal window titled "stream.py — streaming (git: master)". The window contains a Python script with syntax highlighting. The code defines a class "Streaming" with methods for importing data from CSV files, updating a database, collecting tweets, and filtering them by keywords or users. The script uses the Twitter Stream API and interacts with a local database.

```
1 __author__ = "Adrien Guille"
2 __license__ = "GNU GPL"
3 __version__ = "0.1"
4 __email__ = "adrien.guille@univ-lyon2.fr"
5 __status__ = "Production"
6
7 from twitter import *
8 import datetime
9 import threading
10 import subprocess
11
12 tweets_per_file = 500
13
14 def quote(string):
15     return """+string.encode('utf-8')+"""
16
17 class Streaming:
18     def __init__(self, dbname='TwitterDBTest', host='localhost', port=27017):
19         self.db_name = dbname
20         self.host = host
21         self.port = port
22
23     def threadUpdate(self,filename):
24         print('Importing',filename,'...')
25         filepath = 'streaming/data/'+str(filename)+'.csv'
26         if filename == 1:
27             subprocess.call(['sh','stream_run.sh',filepath, self.db_name, self.host, self.port])
28         else:
29             subprocess.call(['sh','stream_update.sh',filepath, self.db_name, self.host, self.port])
30         print('Done.')
31
32     def collect_tweets(self, duration=1, keys=None, follow=None, loc=None, lang='en'):
33         nb_tweets = 0
34         nb_tweets_infile = 0
35         nb_files = 1
36         last_import_day = datetime.datetime.now().day
37         file = open('streaming/data/'+str(nb_files)+'.csv', 'a')
38         auth = OAuth(
39             consumer_key=str(open('streaming/consumer_key','r').read()),
40             consumer_secret=str(open('streaming/consumer_secret','r').read()),
41             token=str(open('streaming/token','r').read()),
42             token_secret=str(open('streaming/token_secret','r').read())
43         )
44         twitter_stream = TwitterStream(auth=auth)
45         start_date = datetime.date.today()
46         end_date = start_date + datetime.timedelta(days=int(duration))
47         if keys != "":
48             print("keywords")
49             iterator = twitter_stream.statuses.filter(track=keys, language=lang)
50         elif follow != "":
51             print("users")
```

Why is there a need for CATS?

- A strong programing background is necessary
- Existing tools are not user-friendly / free
- Bridge the gap between computer and social scientists

Thank you!
=^_^=

More info:

<http://mediamining.univ-lyon2.fr:8080/cats/connect>

or

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