

```
In [1]: import numpy as np
import pandas as pd
#from tweepy.streaming import StreamListener
from tweepy import OAuthHandler
from tweepy import Stream
from textblob import TextBlob
#import TextBlob
import tweepy
import re
from wordcloud import WordCloud, STOPWORDS
```

```
In [2]: consumer_key="pxVtnqmxYRlORbO61He730cjD"
consumer_secret="1uPdOXUtvRTN0ZmodbbUgYyOjs8U8IkGD0d3BMDtjXp4W566mD"
access_token="167750290-1P8C3JDRvoRS1eLa0b2zPRhnwJ9bDY4h0sz8Qb6H"
access_secret="OmFH0bmb1okjF5puI9IxcvxX0DWI4JUrbmNDJqMNR7T70"

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

```
In [3]: api = tweepy.API(auth)

        fetched_tweets = api.search(q = 'MAchine Learning' , count = 400 , ln='en')
```

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In [4]: fetched_tweets
```

```
Out[4]: [Status(api=<twepy.api.API object at 0x000000C648F0BE80>, _json={'created_at': 'Wed Aug 28 09:23:30 +0000 2019', 'id': 1166642453438484480, 'id_str': '1166642453438484480', 'text': '@kleinuwu If you're okay with ignoring all the data protection issues and your appearance landing in machine learni... http://t.co/5su0JlutlJ', (https://t.co/5su0JlutlJ,) 'truncated': True, 'entities': {'hashtags': [], 'symbols': [], 'user_mentions': [{'screen_name': 'kleinuwu', 'name': 'süssmaus', 'id': 711452254, 'id_str': '711452254', 'indices': [0, 9]}]}, 'urls': [{'url': 'https://t.co/5su0JlutlJ', 'expanded_url': 'https://twitter.com/i/web/status/1166642453438484480', 'display_url': 'twitter.com/i/web/status/1...', 'indices': [117, 140]}]}, 'metadata': {'iso_language_code': 'en', 'result_type': 'recent'}, 'source': '<a href="http://twitter.com/download/android" rel="nofollow">Twitter for Android</a>', 'in_reply_to_status_id': 1166635034561908736, 'in_reply_to_status_id_str': '1166635034561908736', 'in_reply_to_user_id': 711452254, 'in_reply_to_user_id_str': '711452254', 'in_reply_to_screen_name': 'kleinuwu', 'user': {'id': 277422667, 'id_str': '277422667', 'name': '▼▲PAVL▲', 'screen_name': 'powlpaul', 'location': 'Berlin, Deutschland', 'description': '3D artist & P o l y g r a p h ≠ Internet Advisor ≠ Testimonials: "bemerkenswert und ausgewählt gut aussehend"', 'url': 'http://t.co/WYbPEbj0Oh', 'entities': {'url': {'urls': [{'url': 'https://t.co/WYbPEbj0Oh', 'expanded_url': 'https://www.dropbox.com/s/576260b6a87f145a/pavl.html'
```

```
In [5]: tweet_df=pd.DataFrame(columns=["text"])
```

In [6]: tweet_df

Out[6]:

text

```
In [7]: tweets = []
#parsing tweet one by one
for tweet in fetched_tweets:
    tweets_text = tweet.text
    #appending parsed tweet to tweet list
    tweets.append(tweets_text)

tweet_df["text"]=tweets
tweet_df.iloc[12,0]
```

Out[7]: 'RT @KirkDBorne: Bayesian #MachineLearning -\nPart 1: <https://t.co/ADIREGWQ7q>\nPart (https://t.co/ADIREGWQ7q\nPart) 2: <https://t.co/jH143FeHN8>\nPart (https://t.co/jH143FeHN8\nPart) 3: <https://t.co/OETWxzpPiM...>' (https://t.co/OETWxzpPiM...')

In []:

In [8]: tweet_df["text"]=pd.DataFrame(tweet_df["text"].unique())

In [9]: tweet_df1=tweet_df.dropna()

In [10]: tweet_df1.isnull().sum()

Out[10]: text 0
dtype: int64

In [11]: tweet_df1.head()

Out[11]:

	text
0	@kleinuwu If you're okay with ignoring all the...
1	Google's new approach to machine learning with...
2	Is #MachineLearning engineer career your dream...
3	RT @DATAFYiNG: What Machine Learning Teaches U...
4	【大阪開催】MACHINE LEARNING Meetup KANSAI #6 @ 〒530...

In [12]: stopwords = set(STOPWORDS)


```
In [16]: df_sent = tweet_df1
```

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In [17]: count = 0
df = tweet_df1["text"].astype(str)
for i in df:
    #print analysis sentiment .polarity
    analysis = TextBlob(df[count])
    df_sent.loc[count,"Sentiment"]=analysis.sentiment.polarity
    count=count+1
```

C:\Users\RAM1\Anaconda3\lib\site-packages\pandas\core\indexing.py:357: SettingWithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.

Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: <http://pandas.pydata.org/pandas-docs/stable/indexing.html#indexing-view-versus-copy> (<http://pandas.pydata.org/pandas-docs/stable/indexing.html#indexing-view-versus-copy>)

self.obj[key] = _infer_fill_value(value)

C:\Users\RAM1\Anaconda3\lib\site-packages\pandas\core\indexing.py:537: SettingWithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.

Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: <http://pandas.pydata.org/pandas-docs/stable/indexing.html#indexing-view-versus-copy> (<http://pandas.pydata.org/pandas-docs/stable/indexing.html#indexing-view-versus-copy>)

self.obj[item] = s

In [18]: df_sent

Out[18]:

	text	Sentiment
0	@kleinuwu If you're okay with ignoring all the...	0.500000
1	Google's new approach to machine learning with...	0.136364
2	Is #MachineLearning engineer career your dream...	0.500000
3	RT @DATAFYING: What Machine Learning Teaches U...	0.000000
4	【大阪開催】 MACHINE LEARNING Meetup KANSAI #6 @ 〒530...	0.000000
5	RT @SwissCognitive: Here are 7 of the best #AI...	1.000000
6	RT @ailabsacademy: Machine Learning is essenti...	0.068182
7	Machine Learning in the Browser using TensorFI...	0.000000
8	Data teams are diverse. A single team comprise...	-0.071429
9	RT @ipfconline1: 10 #MachineLearning Methods t...	0.000000
10	RT @SamuelL_WonG_: What Machine Learning Teache...	0.000000
11	RT @maxjcm: #AI And Machine Learning TED Talks...	0.000000
12	RT @KirkDBorne: Bayesian #MachineLearning —\nP...	0.000000
13	RT @SpirosMargaris: 7 Must-See #TEDTalks \n\nO...	0.000000
14	RT @machine_ml: RT @chidambara09: RT @RealSain...	0.000000
15	#ExploreML session 1 done successfully. Agreei...	0.450000
16	Shaping the #Future of #Technology #Governance...	0.000000
17	RT @empleoleon: Telice busca Senior Machine Le...	0.000000
18	Machine Learning in the Browser using TensorFI...	0.000000
19	RT @ThancmarFeldt: Women Are "Beautiful", Men ...	0.850000
20	RT @BlackLineAPAC: BlackLine will leverage Goo...	0.250000
21	RT @Datascience__: Python Machine Learning Pro...	0.000000
22	Leading Israeli law firm Amit, Pollak, Matalon...	-0.200000
23	RT @RealSaintSteven: Machine learning for data...	0.000000
24	RT @maxjcm: Ways #YouTube Uses #ArtificialInte...	0.000000
25	RT @SAPAnalytics: In the SAP #S4HANA 1908 rele...	0.468182
26	Great use of real time machine learning: Germa...	0.333333
27	Women Are "Beautiful", Men Are "Rational": Mac...	0.850000
28	What the Machine Learning Value Chain Means fo...	0.000000
29	RT @Datascience__: The Essential Tools of Scie...	0.000000
...
55	5 Machine Learning Lessons for Product Manager...	0.000000
56	RT @suzatweet: We're excited to welcome Decisi...	0.587500
57	The symposium of researchers presenting their ...	0.500000

	text	Sentiment
58	RT @berty38: Tomorrow is yet another first cla...	0.253788
59	RT @thinkmariya: You can start building your f...	0.250000
60	RT @yu__ya4: 本日はこれです。会場は Wantedly です。いつもと毛色が違う...	0.000000
61	Oracle's Machine Learning Strategy ZDNet htt...	0.000000
62	With #privacy being on everyone's minds, #fede...	1.000000
63	RT @slavesonmars: Google sent Police to intimi...	0.000000
64	The Global Open Initiative Foundation team on ...	0.000000
65	【イベント情報】\n#ハカルス が関西のIT企業と合同運営している機械学習勉強会コミュニテ イ ...	0.000000
66	RT @ipfconline1: Using #MachineLearning to Bat...	0.000000
67	RT @STEIMamsterdam: We have an incredible line...	0.900000
68	RT @IAM__Network: Fueling 5G Revenue Growth wi...	0.000000
69	【大阪開催】 MACHINE LEARNING Meetup KANSAI #6に参加を申し込...	0.000000
70	RT @HighlightsLisk: Ceo of @gny_io bringing ma...	0.100000
71	RT @BlackLine: BlackLine will leverage Google ...	0.250000
72	Women Are "Beautiful", Men Are "Rational": Mac...	0.850000
73	AI Rushes Forward Driven by a Sense of Urgency...	0.000000
74	via @RichardEudes - String Matching Using Mach...	0.000000
75	RT @Jahangeerm: What is machine learning? #Dig...	0.000000
76	New job posting: Vikas Soni - - Machine Learni...	0.136364
77	RT @PB_PatrickBauer: Why #cloud based #machine...	0.000000
78	Today we're organizing a workshop on machine l...	0.000000
79	The Top 5 Machine Learning Libraries in Python...	0.450000
80	Use Machine Learning to Make Apps and AI to De...	0.000000
81	RT @tazi_ai: Are your ready for the Next Gener...	0.100000
82	How is the financial services industry using m...	0.000000
83	Unsupervised Learning in R: This course provid...	0.000000
84	@nairmayukh Hi Mayukh, thank you for flagging ...	0.000000

85 rows × 2 columns

In [19]: `df_sent.iloc[12,0]`

Out[19]: 'RT @KirkDBorne: Bayesian #MachineLearning -\nPart 1: <https://t.co/ADIREGWQ7q>\nPart (https://t.co/ADIREGWQ7q\nPart) 2: <https://t.co/jH143FeHN8>\nPart (https://t.co/jH143FeHN8\nPart) 3: <https://t.co/OETWxzpPiM>...' (https://t.co/OETWxzpPiM...')

```
In [20]: np.mean(df_sent["Sentiment"])
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Out[20]: 0.13344983447924622
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In [ ]:
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In [ ]:
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