SOCIAL NETWORK ANALYSIS REPORT "AMBER HEARD"

OVER 2019 IN TWITTER

June 30, 2021
Made by: Abdelrahman Yasser
Email: abdelrahmanyfk@gmail.com

Amber Heard was exposed to social media attacks by BotNets, this report is simple analysis to present the facts and to support all social media victims.

Data used: it is data scrapped from twitter for all users tweeted in occasional event to support or attack amber and in this report, we are covering the analysis in 2019 for social attack (Tweets) against Amber Heard.

Analysis Team: We are group of three who had the passion to the case and the curiosity to investigate the data to verify & validate the facts.

Analysis Tool: We used python programming to wrangle & clean the data to make it applicable for appropriate visualization using python frameworks like seaborn, matplotlib, numpy, pandas.

Analysis Approaches: We Investigated the anomalies in data for the tweets, date of tweets, users, user's creation dates and so on.

Finally, we want to invite anyone who needs the good use of data to reach us to support him or her wherever in the world

We're glad to help…...

Thanks

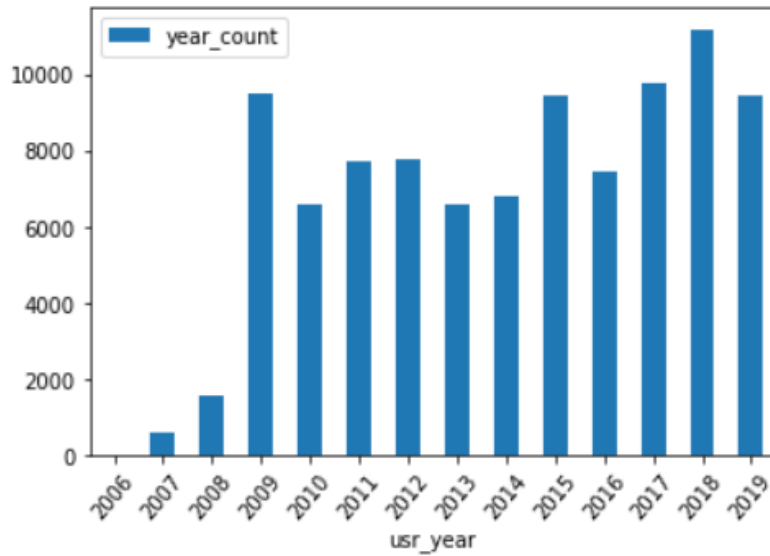We will Start in 2019 with general statistics as follow:

- No. of tweets from users created in 2019: 9426
- No. of tweets from users created in rest years: 84920
- No. of tweets in the same day of user creation in 2019: 1092
- proportion of tweets from users created in 2019 is 10%
- the probability of tweets in the same day for all 2019 users 3.5%
- the probability of tweets within 14 days only for all 2019 users 15%
- No. of users created in 2019 is: 2041
- No. of proportion of users created in 2019 are :5.93%

Almost 2041 users created in 2019 (5.9% of total users tweeted in 2019) those fresh users tweeted (10%) from the whole tweets in 2019 (3.5%) of them tweeted in the same day From a general view to the data when sorting them in descending order many have tweeted after creation of the new user within few minutes only!

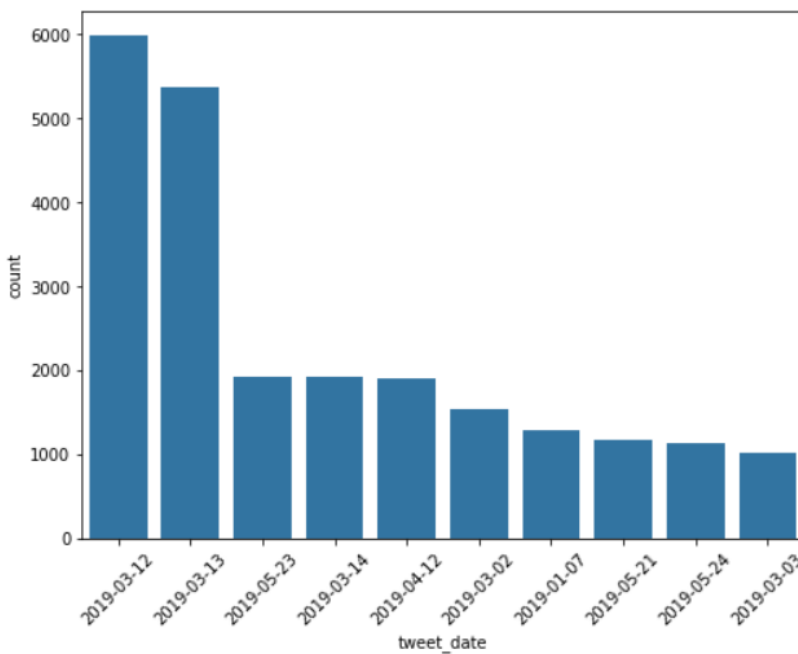Estimation of no. of tweets from users created in all years

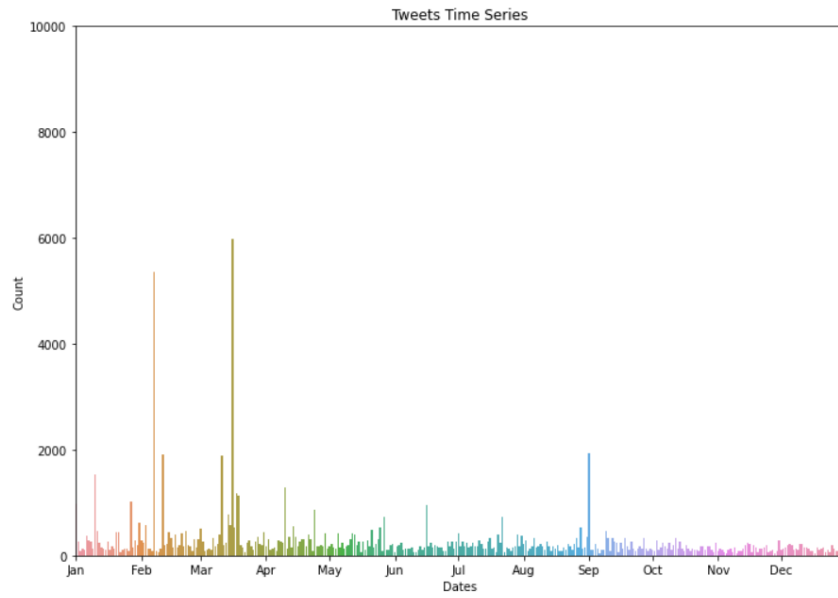|	usr_year	year_count
0	2006	4
1	2007	605
2	2008	1541
3	2009	9512
4	2010	6569
5	2011	7712
6	2012	7785
7	2013	6587
8	2014	6789
9	2015	9425
10	2016	7454
11	2017	9757
12	2018	11180
13	2019	9426

Figure.1

Graph.1

As we can see in the graph above that the users created in 2018 & 2019 have a significant effect on 2019 tweets
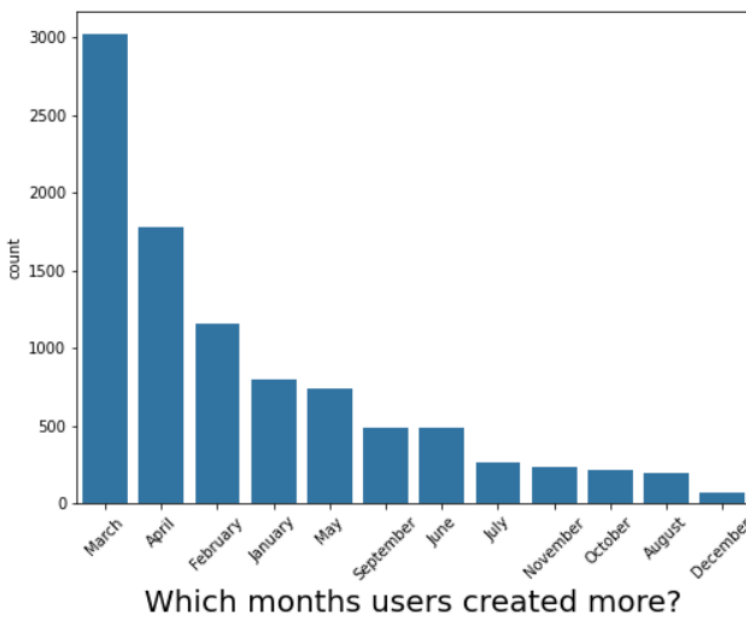

Graph.2

Those are the trend dates of tweets count in 2019, and make sure to remember those specific dates later as they repeated again in multiple different occasions.

Graph.3

This is a time series analysis over 2019 for the tweets counts as we can see above that February and March are the most obvious dates of rush tweet days.

Graph.4

The Graph above emphasize that the highest months of user creation in 2019, are **March & April.**
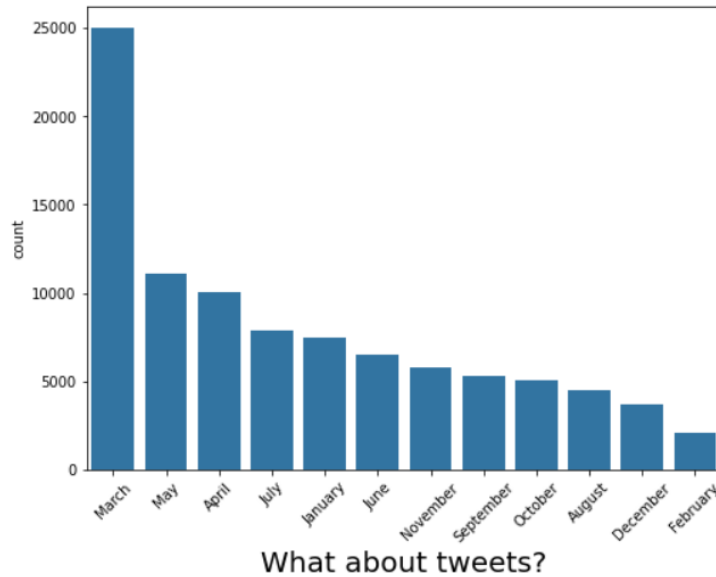
Chart. 5

In Chart. 5, March has the highest tweets' count in 2019, according to "Chart. 4" & "Chart. 5", **We Can conclude the following:**

1. The Users created as showed in "**Graph.4**" had an effect over the tweet's count in 2019 as in "**Graph. 5**" due to matching of two months.
2. Those users created in March, were only created to increase the volume of tweets and later in this report, we will prove it.
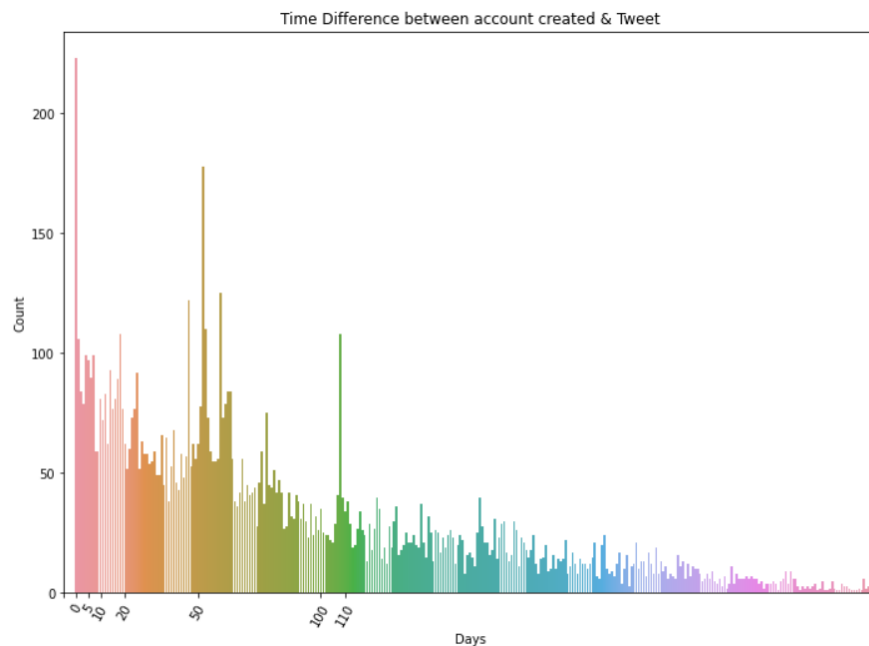

Chart. 6

The chart. 6 shows the behavior of the users created in 2019, it expresses the tweet counts for those users, as obvious, the users of 0-10 days on twitter had the highest tweet's count.
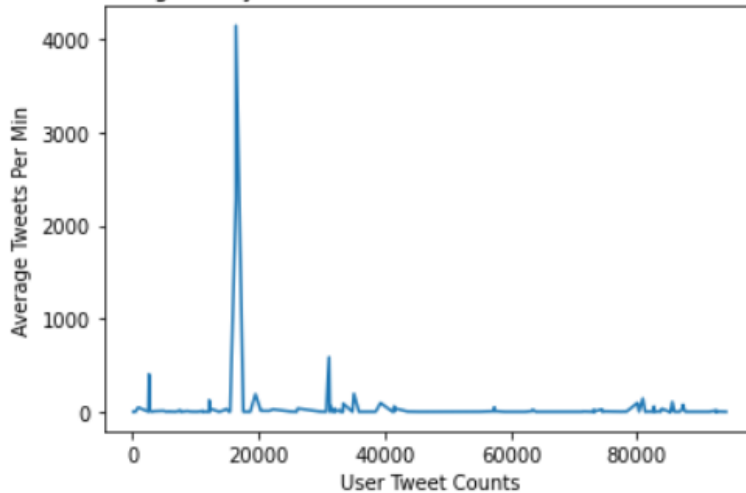

Chart. 7

As shown above, this is the average tweets per minute for users created in 2019 with **Zero Days Age on twitter.**
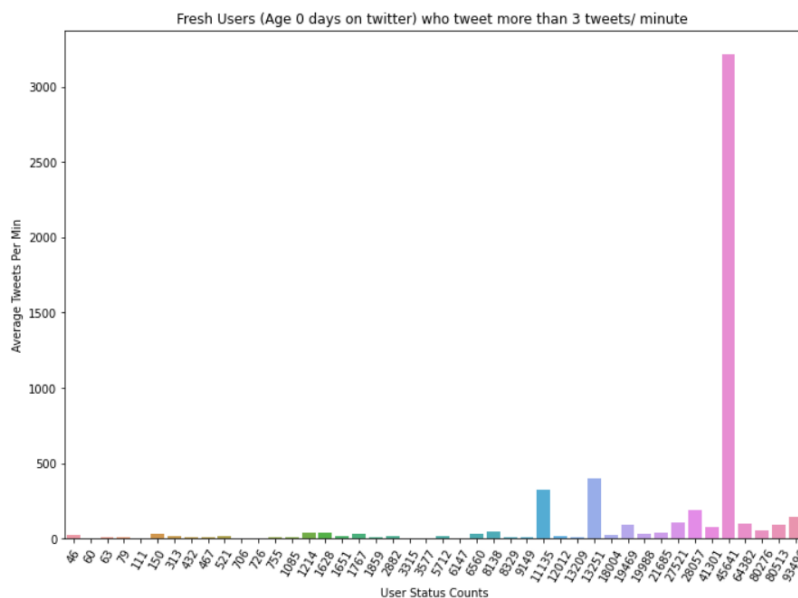

Chart. 8

All bars appeared in "Chart. 8" Represents the **Zero Days Age** users who tweeted more than or equal to **"THREE"** tweets per minute which is above the human average for tweeting per minute, for more clarification, it's like that the user is tweeting or retweeting every **20 Seconds.**

Moreover, it's pretty clear the there is some user made tweets rate beyond impossible as you can see, further, there user_name is as follow:

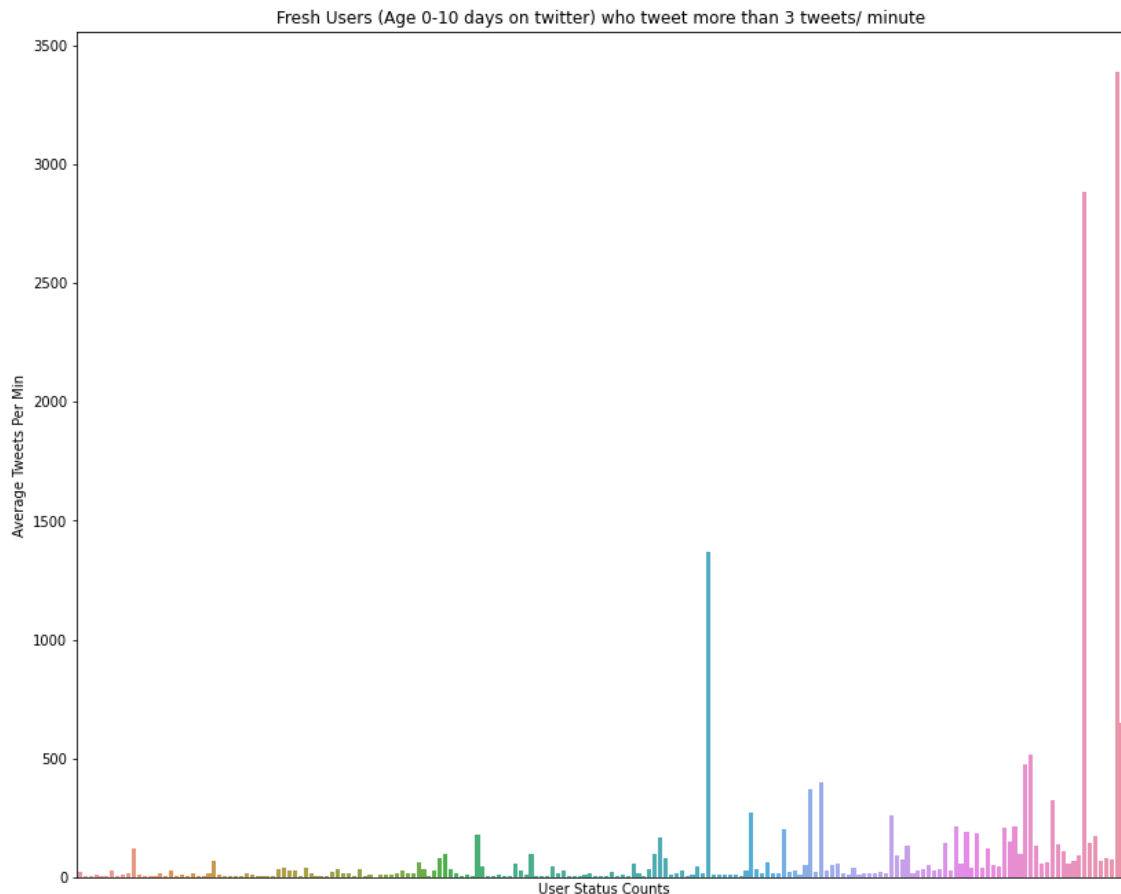|				
EloisaNieves1	cherrymalk	samjrakoh	MandyFranceJD	SkLumos
clarksskents	jhnnyrdj	darkofvenus	PerennialVape	TheNamesQ
axelsbabeylamb	Sarah_Zarin	yourfavpaella	jcdipacino	pppthrnykl
Aliyah81467034	korayaydn_s	Annouki2	THCSLAVICSHADOW	blockedbyamber1
wesexualpeople	vindicatorsquad	capmwidow	xdiordepp	HeardSociopath
thenationroar_	SosiasAon	_manic_intent	eIevenriver	OwenMac01466773
maryfakhoury3	annballedos_	bloodybiebr	avatarjaz	Arbens7
chillomega	finnishtrends	heypeteypie	_ShattaBandle	brekkcrs
FlixSony	beatifulxdark	everyoneisabot	dawrkphoenix	IstandbyJohnny

Chart. 9

"Chart. 9" Represents the **(0-10) Days Age "Fresh Users"** users who tweeted more than or equal to **"THREE"** tweets per minute which is above the human average for tweeting per minute, for more clarification, it's like that the user is tweeting or retweeting every **20 Seconds.**

The Total Number of **fresh users** who made above 3 tweets / minute is **528**