

MVP United Nations Climate Crisis Conference 2021 Twitter Topics (COP26)

The Goal of this project is to recognize the hottest topics on the on twitter in regards of the COP26 summit that has been happening right now (Oct 31 - Nov 12, 2021).

Extra:

- TBD (sentiment analysis)

I have been using 2 types of scraping, one from the APIs provided by the Tweeter developer(which I ended up not using since it wasn't easy to use. As of the second one, with the use of the json files and function, I have collected 10000 for 5 hashtags of #COP26 #ClimateChange #TogetherForOurPlanet #ClimateCrisis #GlasgowCOP26. There was about 2500 duplicates which made me end up with 7616 data.

Topic Interpretation

```
In [81]: for tweet in tweet_topic_matrix_df.sort_values(by='topic_0', ascending=False).head(10)['raw_tweets'].values:
          print(tweet)
          print()

#climatechange https://t.co/UGRQoa3o2R

#ClimateChange #UN https://t.co/ly4TvQ6Epd

#climatechange https://t.co/VW2oaLfE1r

#climatechange #cop16 https://t.co/8e94dFoeWB

It never was about #climatechange https://t.co/Jy8jzW48uJ

#ClimateChange https://t.co/8dXn7HUT4z

https://t.co/sK3V9xtAQu #ClimateChange 🌍

https://t.co/WHP0yg7jUy - Climate Action Plan 2021 - #climatechange https://t.co/Ristfy93F9

Why our #CLIMATE targets keep changing, and how that helps fight climate change even if we miss them https://t.co/XorUcaGck2 #GlobalWarming #climatechange

Why our #CLIMATE targets keep changing, and how that helps fight climate change even if we miss them https://t.co/JeIHci248E #GFWX #GlobalWarming #climatechange
```

```
In [81]: word_topic_matrix_df.sort_values(by='topic_0', ascending=False).head(10)
```

Out[81]:

	topic_0	topic_1	topic_2	topic_3	topic_4
climatechange	1.579665	0.000000	0.000000	0.000000	0.000000
climate	1.136625	0.000000	0.210654	0.000000	0.000000
change	0.791316	0.000000	0.000000	0.000000	0.292575
accp	0.596369	0.006120	0.008658	0.029379	0.000000
action	0.359644	0.000000	0.011259	0.032271	0.000000
world	0.336710	0.000000	0.041823	0.006055	0.445667
global	0.336689	0.021288	0.016754	0.029595	0.021051
globalwarming	0.170300	0.000000	0.000001	0.000000	0.000000
people	0.259119	0.000000	0.058825	0.000000	0.027591
energy	0.054120	0.000205	0.000938	0.000521	0.000000

```
In [88]: for tweet in top_tweets(tweet_topic_matrix_df, 'topic_1', 5):
          print(tweet)
          print()
```

Con la declaración de Glasgow el turismo asume la responsabilidad sobre la acción climática en la actividad y que el cambio climático y la contaminación ponen en peligro el desarrollo turístico. La sostenibilidad es esencial en el turismo que viene!

#COP26 <https://t.co/mQ8ZT5GjV>

El @GobiernoMX no firmó el acuerdo global para detener y revertir la pérdida de bosques y la degradación de la tierra para el 2030, como lo hicieron más de 100 líderes mundiales en la #GlasgowCOP26. <https://t.co/pezi1eink>

El @GobiernoMX no firmó el acuerdo global para detener y revertir la pérdida de bosques y la degradación de la tierra para el 2030, como lo hicieron más de 100 líderes mundiales en la #GlasgowCOP26. <https://t.co/6Lspw8GcU>

Idgex aseguró que la firma del convenio para revertir la deforestación en la #GlasgowCOP26 fue una idea de su gobierno o inspirada en el programa 'Sembrando Vida'.

Pero el presidente es tan humilde que ni asistió a la cumbre para que le dieran las gracias.

Dolores Turisofo

#Internacional La cumbre del clima es #GlasgowCOP26 Sin la #China el principal contaminador del planeta, la cumbre es una pérdida de tiempo. El titero de @BarackObama @Joe Biden aprovechó la oportunidad para dormir. En serio! Este es el Presidente de los #Estados Unidos No Jodas! <https://t.co/Q8uHYG6eWc>

```
In [85]: top_words(word_topic_matrix_df, 'topic_1', 10)
```

```
Out[85]:
1a      1.304380
en      1.084278
el      0.951200
que     0.631336
los     0.461427
del     0.431201
para    0.424016
se      0.346824
por     0.341325
es      0.301929
name: topic_1, dtype: float64
```

As of baseline when running NMF we could see for the first topic:

1. Due to the #climatechange we are not getting a good interpretation for topic 1 and need to remove all hashtags in this regards.
2. Topic 2 is in Spanish and as for the top word matrix we are getting mostly adjectives. I'm going to remove languages other than English for a better interpretation on topics and understanding.

Besides that, I have been organizing the my data frame since this Json files have been super unorganized and unable to work with.

** I will be going back and try to get more tweets closer to the final project day, since the conference is still going on and a lot more tweets are getting posted in regards of this conference.

Next Steps:

- Separate English language tweets from my data frame
- Remove Stop words
- Stemming
- Lemmatizing
- Vectorization
- Then get into NMF....

	twitter_id	content	removed_links	removed_users	removed_hashtags	removed_av	tokens	lemmatized
0	squillainexos	@Bantern42404891 @M-HarryCole Absolutely one s...	@Bantern42404891 @M-HarryCole Absolutely one s...	Absolutely one self indulgent ego trip!! #COOP26	Absolutely one self indulgent ego trip!!	Absolutely one self indulgent ego trip!!	absolutely self indulgent ego trip	absolutely self indulgent ego trip
1	GFG_JGM_Info	Please join us at a #COOP26 side event "Implementing ...	Please join us at a #COOP26 side event "Implementing ...	Please join us at a #COOP26 side event "Implementing ...	Please join us at a side event "Implementing ...	Please join us at a side event "Implementing ...	join event implement, joint credit mechanism, jo...	join event implement, joint credit mechanism, jo...
2	zpnine	#India's huge solar uptake has boosted climate...	#India's huge solar uptake has boosted climate...	#India's huge solar uptake has boosted climate...	's huge solar uptake has boosted goals, says ...	's huge solar uptake has boosted goals, says ...	huge solar uptake boost goals say minister	huge solar uptake boost goals say minister
3	AsoPaabrasCI	Reunión #COOP26 Reunión mundial de países sobre...	Reunión #COOP26 Reunión mundial de países sobre...	Reunión #COOP26 Reunión mundial de países sobre...	Reunión Reunión mundial de países sobre cambio ...	Reunión Reunión mundial de países sobre cambio...	reunión reunión mundial países sobre cambio d...	reunión reunión mundial países sobre cambio d...
4	Cartieret	@_pln_id PLN terdepan dukung pemanfaatan FRT 🌱🌱...	@_pln_id PLN terdepan dukung pemanfaatan FRT 🌱🌱...	@_pln_id PLN terdepan dukung pemanfaatan FRT 🌱...	@_pln_id PLN terdepan dukung pemanfaatan FRT 🌱🌱...	@_pln_id PLN terdepan dukung pemanfaatan FRT 🌱🌱...	pln pln terdepan dukung pemanfaatan frt	pln pln terdepan dukung pemanfaatan frt