

Election Campaign Dynamics

Updates, Website, Future additions

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OUTLINE

1. Updates

2. Website

3. Future additions

Updates

UPDATES

- New objective: a website
 - to create and download election social media data
 - for specialized research
 - topic modeling visualization

Website

DEPLOYED WEBSITE

Election

Create Election Corpus:

Select one Candidate:



From

2021-10-22



To

2021-11-21



Create the file & Download

@ Username

From

2021-10-22



To

2021-11-21



Create the file & Download

© 2021

Election2022

TECHNOLOGIES

- Python
- C# & .Net Core
- Azure



Future additions

PREPROCESSING OF CSV FILES

Provide users with the ability to preprocess the tweet content of their CSV files with the help of a predefined function that performs lemmatization and removes:

- stopwords
- re-tweets
- http/bitly links
- hashtags
- punctuation, double spacing
- numbers
- photos
- emoticons

BERTopic

Add customizable dynamic topic modeling with BERTopic:

- present topic visualization over time
- allow users to manually change parameters (e.g. change number of topics)
- allow users to add stopwords of their choosing to the preprocessing step

BERTOPIC

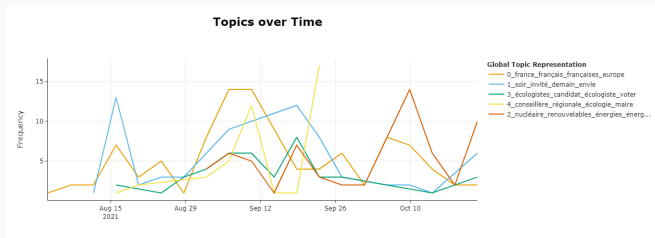


Figure 1: Predefined preprocessing

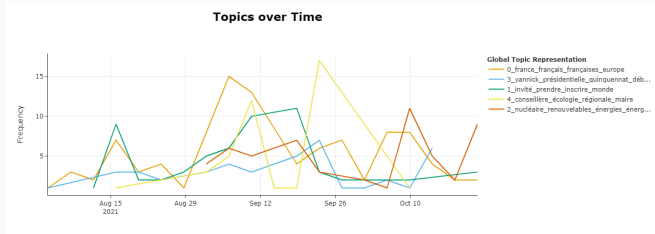


Figure 2: Extended stopwords

BERTOPIC

Global Topic Representation

- 0_france_français_françaises_europe
- 1_soir_invité_demain_envie
- 3_écologistes_candidat_écologiste_voter
- 4_conseillère_régionale_écologie_maire
- 2_nucléaire_renouvelables_énergies_énerg...

Figure 3: Predefined preprocessing

Global Topic Representation

- 0_france_français_françaises_europe
- 3_yannick_présidentielle_quinquennat_déb...
- 1_invité_prendre_inscrire_monde
- 4_conseillère_écologie_régionale_maire
- 2_nucléaire_renouvelables_énergies_énerg...

Figure 4: Extended stopwords

BERTOPIC

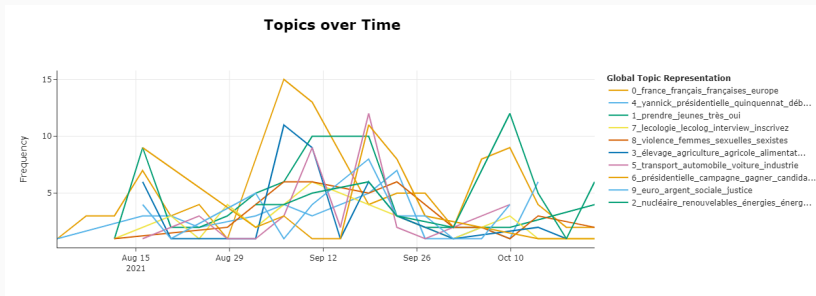


Figure 5: Ability to choose number of topics

NETWORK ANALYSIS

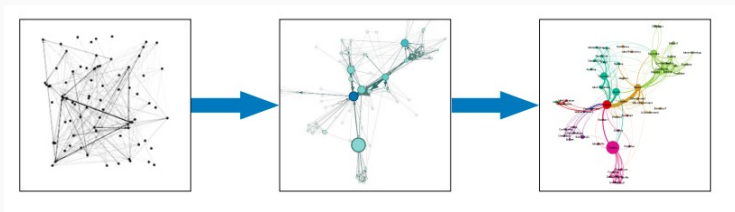
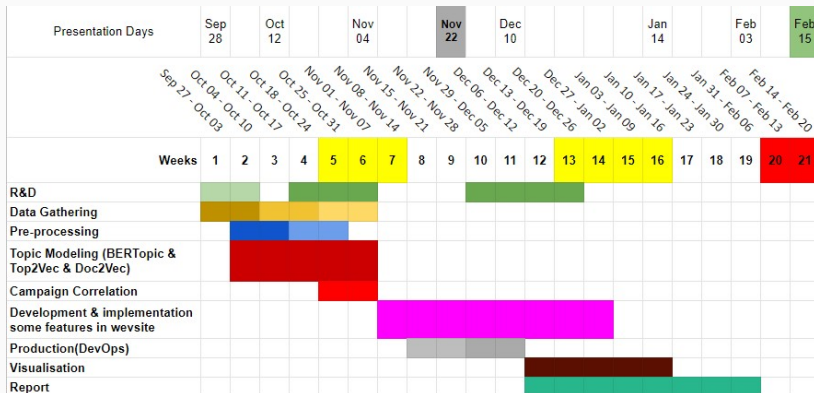


Figure 6: Gephi

- Community detection
- Circulation of the topics between communities

TIMELINE



Thank you!