Technology behind hate speech

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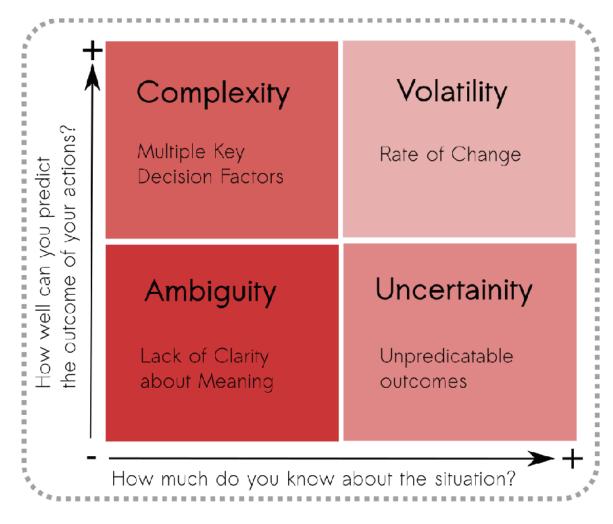
Hate speech: definition

 Facebook: "We define hate speech as a direct attack on people based on what we call protected characteristics—race, ethnicity, national origin, religious affiliation, sexual orientation, caste, sex, gender, gender identity, and serious disease or disability. We define attack as violent or dehumanizing speech, statements of inferiority, or calls for exclusion or segregation."





VUCA concept.







Hate speech on Twitter.

How Twitter works: **Partido Popular** VOX **PSOE** @macarena olona @instasamer @luis endera **PODEMOS** ciudadanos





Hate speech on Twitter.

Types of nodes:

- Fake accounts and cyborgs: The user is a human who uses automation to amplify their messaging.
- Bots: Fully automatic accounts
- Sockpuppets: Real accounts that have not been used for a while. They amplify messages.
- Teams: Grups of people that generate previously agreed content.





Hate speech and racist discourses have increased since 2017.



UNITED NATIONS STRATEGY AND PLAN OF ACTION ON HATE SPEECH

Foreword

Around the world, we are seeing a disturbing groundswell of xenophobia, racism and intolerance – including rising anti-Semitism, anti-Muslim hatred and persecution of Christians. Social media and other forms of communication are being exploited as platforms for bigotry. Neo-Nazi and white supremacy movements are on the march. Public discourse is being weaponized for political gain with incendiary rhetoric that stigmatizes and dehumanizes minorities, migrants, refugees, women and any so-called "other".

This is not an isolated phenomenon or the loud voices of a few people on the fringe of society. Hate is moving into the mainstream – in liberal democracies and authoritarian systems alike. And with each broken norm, the pillars of our common humanity are weakened.

13 UN key committments

United Nations Secretary-General António Guterres

May 2019





Hate speech and racist discourses have increased since 2017.



Joint open letter on concerns about the global increase in hate speech

Signed by 26 mandates, see list below

We are alarmed by the recent increase in hateful messages and incitement to discrimination and hatred against migrants, minority groups and various ethnic groups, as well as the defenders of their rights, in numerous countries. Hate speech, both online and offline, has exacerbated societal and racial tensions, inciting attacks with deadly consequences around the world. It has become mainstream in political systems worldwide and threatens democratic values, social stability and peace. Hate-fuelled ideas and advocacy coarsen public discourse and weaken the social fabric of countries.





Hate speech and racist discourses have increased since 2017.

• In some sensitive places top politicians and local municipalities have taken these discourses as part of their political agenda.







Hate speech and racist discourses have increased since 2017: COVID19

United Nations
Guidance Note
on Addressing
and Countering
COVID-19 related
Hate Speech

11 MAY 2020

RECOMMENDATIONS:

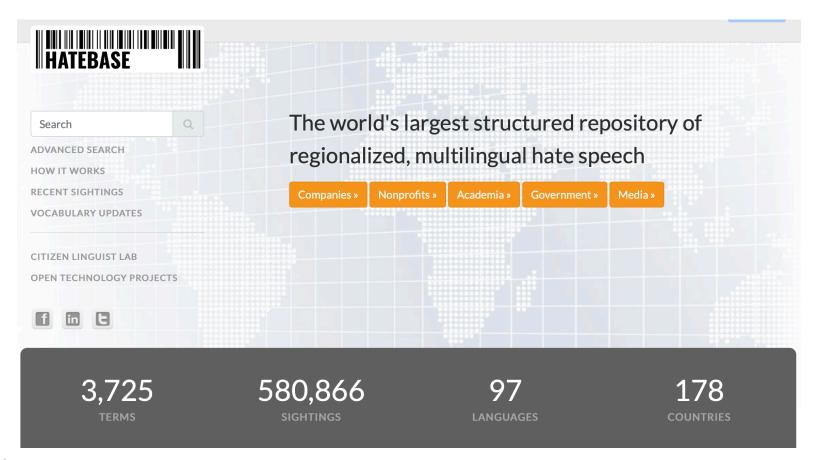
- To united nations departments, agencies, funds and programmes.
- To member states.
- To social media and tech companies.
- To media.
- To civil society and other stakeholders.

The COVID-19 pandemic has amplified existing concerns related to the spread and use of hate speech globally. It has also created new vulnerable groups targeted by hate speech.





Hate speech detection and monitoring: database.







Hate speech detection and monitoring: verification.



FAke News discovery and propagation from big
Data ANalysis and artificial intelliGence Operations

The aim of FANDANGO is to aggregate and verify different typologies of news data, media sources, social media, open data, so as to detect fake news and provide a more efficient and verified communication for all European citizens.

Fandango-project.eu has received funding from the European Union's H2020 EU research and innovation programme.





Hate speech detection and monitoring: network analysis.

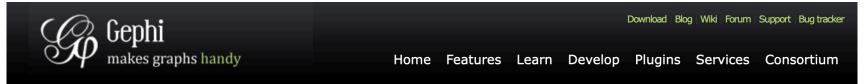
Klausen et al. (2012): 1) Nodes are coded in a formalised manner and subjected to statistical analysis. 2) Social Network Analysis (SNA) can be used to map communication structures and provide intuitive understanding of different types of communication networks.

Mathew et al. (2019): Understand the dynamics of user interaction that facilitate the spread of hateful content.

@seinecle



Hate speech detection and monitoring: network analysis.



The Open Graph Viz Platform

Gephi is the leading visualization and exploration software for all kinds of graphs and networks. Gephi is open-source and free.

Runs on Windows, Mac OS X and Linux. Learn More on Gephi Platform »

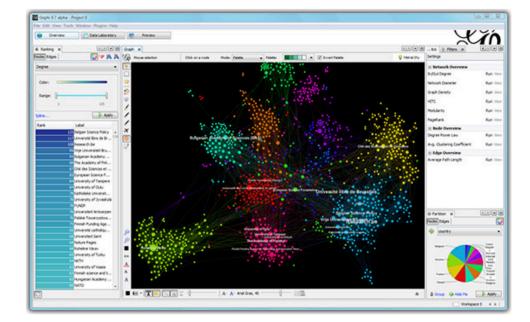


Release Notes | System Requirements



Screenshots



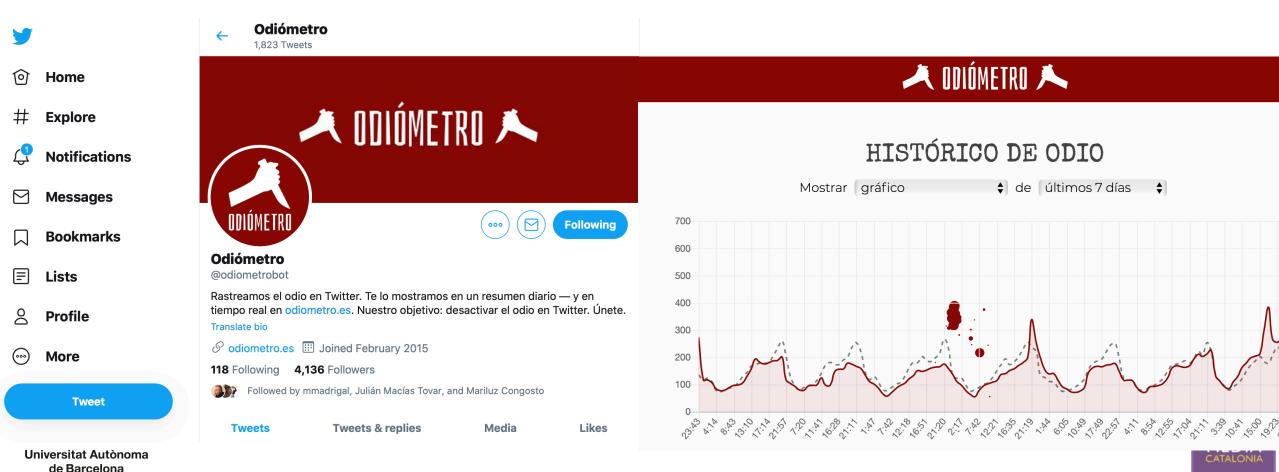


- **Exploratory Data Analysis:** intuition-oriented analysis by networks manipulations in real time.
- Link Analysis: revealing the underlying structures of associations between objects.
- ✓ Social Network Analysis: easy creation of social data connectors to map community organizations and small-world networks.





Communication and visualisation.



Communication and visualisation.



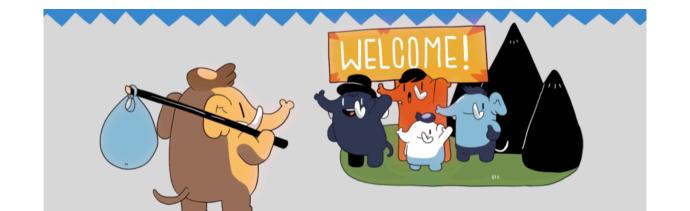




Twitter alternatives?

Mastodon (https://mastodon.social)

Mastodon isn't a single website like Twitter or Facebook, it's a network of thousands of communities **operated by different organizations** and individuals that provide a seamless social media experience. Without an incentive to sell you things, Mastodon allows you to consume content you enjoy uninterrupted. Your feed is chronological, ad-free and **non-algorithmic**—you decide who you want to see!







Twitter alternatives?

Retroshare (https://retroshare.cc)

Retroshare establish encrypted connections between you and your friends to create a **network of computers**, and provides various distributed services on top of it: forums, channels, chat, mail... Retroshare is fully decentralized, and designed to provide maximum security and anonymity to its users beyond direct friends. Retroshare is entirely free and open-source software.







SO-CLOSE: H2020 project

From so far to so close

Enhancing Social Cohesion through Sharing the Cultural Heritage of Forced Migrations

SO-CLOSE is a three-year project created to contribute to social cohesion and fight refugee marginalization or exclusion by facilitating the encounters between similar life stories, through the mediation of innovative digital and artistic tools.

Based on theories of cultural heritage-making, SO-CLOSE will improve social cohesion and promote mutual understanding between refugees and their local communities.



References

- Barber, H-F. (1992). Developing Strategic Leadership: The US Army War College Experience. *Journal of Management Development* 11, no. 6: 4-12.
- MacAvaney, S., Yao, H-R., Yang, E., Russell, K., Goharian, N., & Frieder, O. (2019). Hate speech detection: Challenges and solutions. PLoS ONE 14(8): e0221152. https://doi.org/10.1371/journal.pone.0221152
- Yang, K-C., Varol, O., Hui, P-M., & Menczer, F. (2020). Scalable and Generalizable Social Bot Detection through Data Selection. Vol 34 No 01: AAAI-20 Technical Tracks 1. DOI: https://doi.org/10.1609/aaai.v34i01.5460
- Bastian, M., Heymann, S., Jacomy, M. (2009). Gephi: an open source software for exploring and manipulating networks. International AAAI Conference on Weblogs and Social Media.
- Klausen, J., Barbieri, E., Reichlin-Melnick, A., & Zelin, A. (2012). The YouTube Jihadists: A Social Network Analysis of Al-Muhajiroun's Propaganda Campaign. Perspectives on Terrorism, 6(1), 36-53. Retrieved October 22, 2020, from http://www.jstor.org/stable/26298554
- Mathew, B., Dutt, R., Goyal, P., & Mukherjee, A. (2019). Spread of Hate Speech in Online Social Media. In Proceedings of the 10th ACM Conference on Web Science (WebSci '19). Association for Computing Machinery, New York, NY, USA, 173–182. DOI: https://doi.org/10.1145/3292522.3326034







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