

Hack Hate 2020

HACK MATES:

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https://github.com/pcarugno/hackhate_polar

#project-03-polar

#Project POLAR

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Mission



- Help agencies **understand** how hate and negativity spread online

How

- Investigate tweets' **sentiment** around “hot” social topics/events in the UK



We considered 4 main themes:

- ▶ Immigration/Refugees
- ▶ Environment/Climate
- ▶ Politics
- ▶ LGBTQ+

...over two time periods

- ▶ 2015 – 2016
- ▶ 2019 - 2020

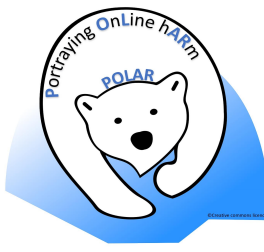


...and then followed the following process

- 1. Tweets' scraping using themes-related keywords, e.g.:**
 - ▶ Immigration/Refugees (UK Immigrant, asylum seeker, refugee, borders)
 - ▶ Environment/Climate (UK climate change, extinction rebellion, Greta Thunberg)
 - ▶ Politics (UK politics, government, politician, ministers)
 - ▶ LGBTQ+ (UK lesbian, gay, asexual, bisexual, drag, trans)
- 2. Text analysis (lemmatization, stemming, data cleaning, Wordcloud creation etc)**
- 3. Sentiment analysis (using TextBlob)**
- 4. Dashboard creation (using plot.ly) and web deployment on Heroku**

<https://project-polar.herokuapp.com/>

Portraying OnLine hARm (POLAR)



[Click here to generate graphs](#)

Immigration

Politics

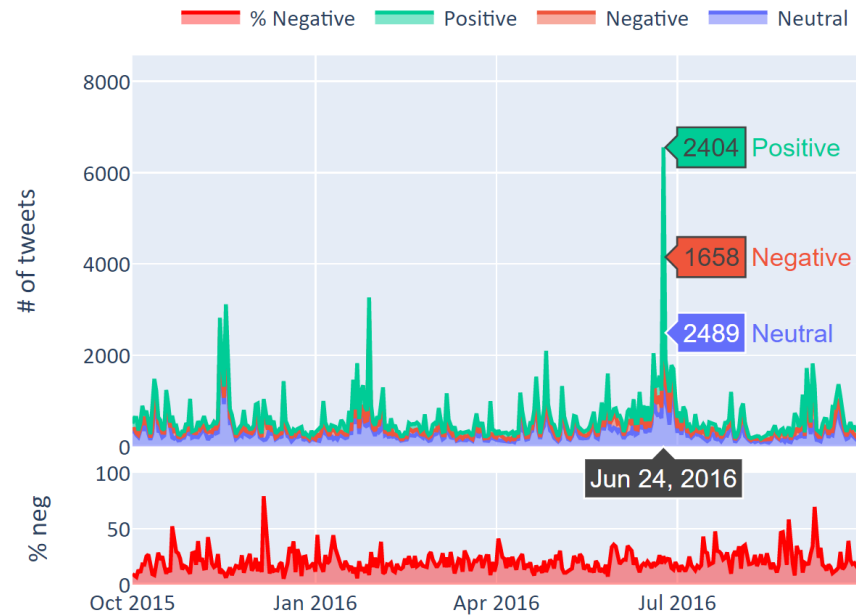
LGBTQ+

Environment

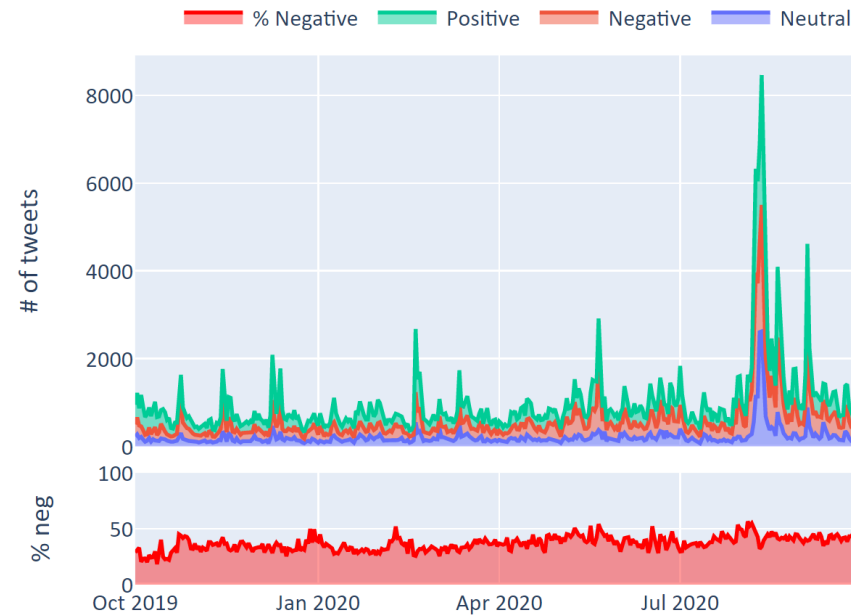
Number of tweets over 12 months split by sentiment



Oct 2015 to Sep 2016



Oct 2019 to Sep 2020



Future developments



- ▶ **Comparison** against twitter trends, newspapers, headlines
- ▶ **Scraping** of more social media outlets (FB, Reddit, etc)
- ▶ **Correlation** with past mainstream events to **predict future** hate/negative spikes online
- ▶ Further **hate classification**

In the future, we hope this will enable agencies to better understand and predict online harm and negative sentiments

THANK YOU POLICE REWIRED, HACK HATE 2020 AND ALL AGENCIES INVOLVED!

IT WAS GOOD FUN AND WE ARE CONTINUING ON THIS PROJECT WITH IMPROVEMENTS AND FEATURES TO BE ADDED IN.. WATCH THIS SPACE!

