

Introduction

In an era where information is relentlessly penetrating people's minds and shaping their opinion and their actions leading in some occasions to strife and societal dysfunction, tools to provide adequate awareness for readers has become crucial for the well being of a society.

The challenge of determining the truth is an age-old battle humans have relentlessly pursued whose solution could require immense resources (source verification, source trust, observation objectivity...) and so needs further investigation.

We, on the other hand, have decided to build a tool, using Google's Natural Language Processing sentiment analysis on its cloud platform to judge an online article, given its URL (or custom text) based on its writing.

It would allow users to know, before reading an article, about how much it is emotionally charged or potentially trying to influence them (whether to the positive or negative).

Distinguish between strong opinions and logical reasoning.

This tool would ideally decrease the severity of the psychological effect of extreme articles and reinforcement bias, while potentially adding value to articles that rely more on reason.

Technical Challenges

Challenges:

First time using Google cloud and their natural language processing (NLP) API

Determining threshold to classify documents (manual)

1. Select representative sample of online articles
2. Run NLP and extract parameters
3. Plot parameter histogram
4. Decide on classification thresholds

Limitations

Limitations: sometimes incorrect "facts" without explicit emotional/exaggerating statements could still influence individuals.

Next Step

Next step, determine negative/positive direction of emotionally charged articles.

Examples: News

Ex1: REM complaining about Trump

<https://www.cnn.com/2019/02/16/politics/rem-trump-everybody-hurts-video/index.html>

exhibits **high** emotions

Ex2: NPR 911 not compensated

<https://www.npr.org/2019/02/16/695481252/9-11-victims-compensation-fund-cuts-payouts-by-as-much-as-70-percent>

exhibits **medium** emotions

Ex3: random arrest

<https://www.cnn.com/2019/02/15/entertainment/jussie-smollett-suspects/index.html>

exhibits **medium** emotions

Ex4: breitbard news about Trump and illegal immigration

<https://www.breitbart.com/clips/2019/02/17/limbaugh-immigration-is-an-emergency-our-culture-at-risk-from-parade-of-illegal-people-who-are-uneducated/>

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Ex5: patribotics mueller

<https://patribotics.blog/2019/02/02/muellers-mystery-case-trumps-worst-news-yet/>

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Ex6: research article on AGU

<https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2018WR023533>

exhibits **little** emotions

Ex7: wikipedia D day

<https://treehacksproj.appspot.com/submitted>

exhibits **little** emotions

Ex8: gravitational waves

<https://www.nature.com/articles/d41586-019-00573-4>

exhibits **little** emotions