# MEDIA MODELING: JOURNALISM DATA COLLECTION AND ANALYSIS

MD SHUEY, 2019



# PROJECT INCEPTION

- Former internship project
- E-mail newsletter summarizing relevant news across 7 major English-language sources
- Originally Excel analysis, later reconstructed via R

Manual Collection (daily)

Manual Classification

Few, Select Sources

### HOW TO RECREATE? HOW TO EXPAND?

- Automatic headline pulling
- Manual classification
- Sentiment analysis

Manual Collection (daily)

Manual Classification

**Select Sources** 

Automatic API Collection

ML Classification text analysis

Any/All Sources!

Get started

Documentation

**News sources** 

**Pricing** 

**News API** is a simple and easy-to-use API that returns JSON metadata for headlines and articles live all over the web right now.



**FREAKING FAST** 

Everything is asynchronously cached for a super-fast response.



FREE FOR DEVELOPERS

Jump right in if you're in development or open source.



**EASY INTEGRATION** 

Get JSON results with simple GET
HTTP requests

```
GET
```

https://newsapi.org/v2/top-headlines?country=us&category=business&apiKey=APIKEY

```
status: "ok"
totalResults: 69,
articles:
       source:
           id: "the-wall-street-journal",
           name: "The Wall Street Journal"
       author: "Maureen Farrell, Liz Hoffman, Eliot Brown, David Benoit",
       title: "Some WeWork Board Members Seek to Remove Adam Neumann as CEO - The Wall
       description: "SoftBank officials are among those expected to push for Neumann
       ouster"
       url: https://www.wsj.com/articles/some-wework-board-members-seek-to-remove-adam-
       neumann-as-ceo-11569171188,
       publishedAt: "2019-09-22T17:14:00Z"
       content: "A bloc of WeWork directors is planning to push \r\nAdam Neumann\r\nto
       step down as chief executive after a tumultuous week in which his eccentric
       behavior and drug use came to light and the startup delayed its much-anticipated
       stock-market listing.A group includi... [+4199 chars]"
      - source:
           name: "Bitcoinist.com"
       author: null,
       title: "Sunday Digest: Bitcoin(BTC) Price Rangebound. Altcoins Start To
```

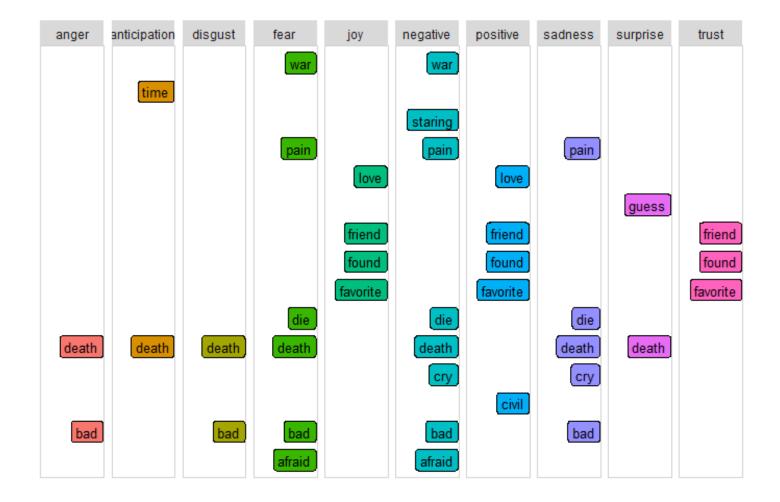
<b>‡</b>	title	description
	FIFA 20 review. Volta brings flair to the familiar	FIFA 20 largely keeps
	Spain's Attempt to Atone for a 500-Year-Old Sin	The country is offering
	15 video games that won't rot your kids' brains - CN	Just because it's a vi
	LATAM unveils Star Wars "Galaxy's Edge" themed li	LATAM Brazil recently
	Climate Protesters and World Leaders: Same Planet,	Friday's global clima
	Ex-Man Utd Star Anderson Officially Retires From Pr	News from around th
World	'Millions' protest in youth-led global climate strike	Masses of children sl
	A New Urgency at Marni	Francesco Risso's sh
	How big was the global climate strike? Here's the b	It was likely the large
	Brazil: Rio favela residents rally after 8-year-old sho	Hundreds gather in E

#### NEWSAPI R WRAPPER

- Github.com/MDshuey/NewsAPI
  - Credit to mkearney for 1.0
  - Possible future pull request for 2.0 updates
- Using R parameters, creates the HTML API call, and converts from JSON to data frame format
- daily\_recaps loop function allows for more efficient pulling (from the last 31 days)
- Variables:
  - Source, author, title, URL, image URL, time published, content (first sentences of article)

#### **USE CASES**

- Customized news alerts
- Time series event detection.
- Determine news cycle beginning, peak, end
  - From this, predict article popularity
- Sentiment analysis of text from difference sources
  - Compare popularity to positivity/negativity index
  - sentiment dictionary matrix (lexicon)



## CONCLUSION



GitHub.com/Mdshuey/Portfolio



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Open to career opportunities!