
Learning from Diverse News Sources: Updated News Anti- Recommendation System

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Recommendation systems are forcing us into echo chambers

How Some Americans Are Breaking Out of Political Echo Chambers

A growing number of people are seeking a wider diversity of news sources or opinions contrary to their own to combat information silos within social media.



Source: [Wired](#)

Previous recommendation system did not provide applicable results

- Dataset limited to 2008-2018
- Many missing pieces of data
- No ability to continually source updated content

Improved data sourcing by creating a data pipeline for current and global news with the ability to be updated live.

Examined 70,000+ news article titles

</newscatcher> API

~top 800 global news sources
~120k articles/day



JSONs added to database

Neural Network

Google News pre-trained model leveraged
Words simply cleaned and tokenized

Sentiment Analysis

Utilized VADER sentiment analysis

**News Article Anti-
Recommendation System**

Created in StreamLit

Final web application created

- Recommended articles are tagged if opinion
- Articles are from within the last few months
- Article links, summaries, and authors are included in the recommendation

News Article Anti-Recommender System

As the information access becomes increasingly online, 'echo chambers' have emerged as a growing concern. Often folks tend to consume and interact primarily with similar information. This can lead to heavily one-sided understandings of social issues. The following tool was designed to help people find content outside of their typically recommended content.

Submit an article title to see article titles within the same topic from different perspectives.

Input article title here:

The U.S. Climate Envoy Went To Moscow And Talked About More Than Climate

Find Articles

Check-out there articles!

Article 1

[Prize-winning activist warns world has 'no time to lose'](#) by None

Article Summary: Kimiko Hirata, winner of the 2021 Goldman Environmental Prize (Photo by Toru Ishii)

Conclusions

- Utilizing current news sources increases the interpretability of recommendations
- Additional context around the recommendation helps make the articles more user friendly
- Future opportunities may include automating the data pipeline and uploading the app to StreamLit Sharing