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

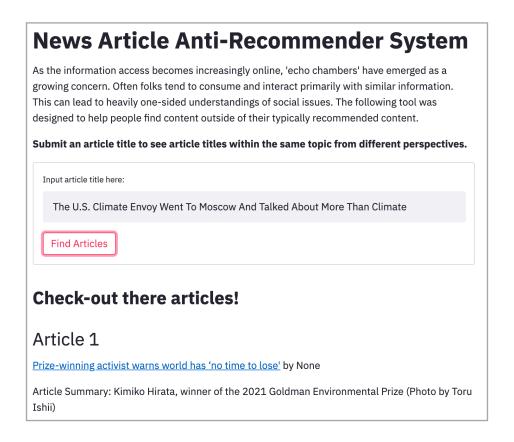
Utilized VADER sentiment analysis

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



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