Inspiration

Today’s media is fraught with bias more than ever. Misdirection and misinformation are everywhere, and it's hard to tell whether the article you’re reading is manipulating you or not. But Just News utilizes complex algorithms and machine learning in order to provide you with an unbiased news experience.

What it does

Given an url to a reputable news source, Just News gathers a group of similar articles on the Internet and displays the most relevant articles from the most reputable news sites of different political perspectives. This data is added into our extensive database of articles and the news sources they originate from.

Using machine learning, we can also predict the political standing of nearly any news outlet not already within our system, and grow more accurate with each article saved onto the database.

We also implemented code that visualizes the similarity index of each source compared to the given article.

How we built it

We created a Flask webapp to handle the processing and analysis of data. Utilizing the open-source Python module newspaper, we were able to extract the key terms of any article and search for recent articles with similar keywords, compare them to a json of credible news sources, and display the general information of each article on our website.

We used pyplot to display the data visualization.

Challenges we ran into

Coming up with an effective way to find enough news sources while simultaneously maintaining a specific level of relevance and credibility took a while.

Many of the big news outlets didn’t allow the use of embedding their websites with iframes, so we had to come up with an elegant solution to display the article info.

Also, 75% of our team were attending our first hackathon and hadn’t worked in these circumstances before.

Accomplishments we’re proud of

We were able to get our machine learning working, which was a huge task that a lot of time was dedicated to. We also were able to do quite advanced stuff with Python. Also, figuring out how to display our articles in an effective way.

What we learned

We learned how to run a website with a Python backend, which none of us had done before.

What’s next

We would come up with ways to increase the precision of our machine learning algorithm as well as add more functionality to the backend so that we could display more information on the webapp.