CS - Effect of Political Polarization on News Related to National Holidays

DS 4002- Spring 2025

Due: TBD

Submission format: GitHub repository (submit link to Canvas)

Individual Assignment

Preparatory Assignments: None

Why am I doing this: This project is designed to help you explore how media sentiment contributes to political polarization, particularly around nationally significant events. By analyzing how different news sources cover the same holidays, you'll gain insight into the tone and bias present in traditional reporting. Your work will contribute to a broader understanding of how information is framed and the impact that framing has on public perception. Ultimately, this case study aims to sharpen your critical thinking, data analysis, and media literacy skills, all of which are essential in today's highly polarized information landscape.

What am I going to do: Begin by reading the hook document to understand the context and motivation behind the case study. Then, using the provided datasets, you'll conduct a sentiment analysis and perform an ANOVA test to examine differences across news sources. Once you have your results, you'll contextualize them within the broader issue of political polarization and create visualizations to clearly communicate your findings. Finally, you'll draw thoughtful conclusions based on your analysis, reflecting on the implications and potential limitations.

Tips:

- Ensure you ask the Professor and TA any questions well in advance to allow ample time for clarification and guidance.
- Make sure to carefully follow the rubric throughout the project to meet all expectations and deliverables.

How will I know I have Succeeded? You will meet expectations on CS - Effect of Political Polarization on News Related to National Holidays when you follow the criteria in the rubric below.

Formatting	• The GitHub Repository should include
	  ○ A README.md file (which auto displays)
	  ○ A LICENSE.md file (use MIT as default)
	  ○ A SCRIPTS folder
	  ○ A DATA folder

	○ AN OUTPUT folder
README.md	• Goal: This file serves as an orientation to everyone who comes to your repository, it should enable them to get their bearings. • Use markdown headers to divide content. • Section 1: Software and platform section • Section 2: A Map of your documentation. • Section 3: Instructions for reproducing your results.
LICENSE.md	• Goal: This file explains to a visitor the terms under which they may use and cite your repository. ○ MIT license us usually appropriate
Scripts Folder	• Goal: This folder contains all the source code for your project. • Include the VADER and ANOVA analysis code
Data Folder	• Goal: This folder contains all of the data for this project. • You should include the initial data, and the final data analyzed. • A Data Appendix file as a PDF, which will include text that you type, as well as tables, figures, and other descriptive statistics.
Output Folder	• Goal: This folder contains all of the output generated by your project (figures, tables, graphs).
Conclusions	• Goal: Compose a brief written conclusion summarizing key findings, discussing potential limitations, and offering insights drawn from the analysis. • Discuss takeaways • Relate to real-life implications of results • No longer than 1 page
References	• All references should be listed at the end of the document • Use IEEE documentation