

# SCIENTIA SOFTMARE

# Karan Dullat; Amrit Mahendrarajah; Arda Onen; Taras Kuzyk Schulich School of Engineering, University of Calgary

### ABSTRACT

### Our NLP tool is designed to extract sentiment from news articles and provide valuable insights to retail

## INTRODUCTION

In today's data-driven world, news articles and social media platforms are valuable sources of information for predicting market trends and gauging public sentiment. Our NLP tool is designed to analyze news articles and provide sentiment analysis to help investors and political staffers make informed decisions. By analyzing the sentiment of news articles related to specific stocks, our tool can help retail investors predict market trends and identify potential investment opportunities. Similarly, political staffers can use our tool to gauge public sentiment on popular issues by analyzing news articles related to the topic. Our user-friendly NLP tool utilizes advanced techniques to accurately measure the sentiment of the content, and generate a score. It can be easily integrated with existing software systems and offers a cost-effective solution to extract sentiment from news articles and provide valuable insights.

### RESULTS

We are proud to announce that our NLP tool accurately predicts the sentiment of articles, enabling retail investors and political staffers to make informed



Our NLP tool offers accurate sentiment analysis of news articles, with a unique feature that allows tracking sentiment trends for publicly traded companies over time. This is valuable for identifying potential investment opportunities. It's userfriendly, cost-effective, and provides reliable sentiment scores. •In addition to finance, our tool has broad applications in politics, allowing political staffers to gauge public sentiment on popular issues and stay ahead of the curve when it comes to policy decisions. Compared to other tools, our interface is clear and intuitive, requiring no technical expertise. In conclusion, our NLP tool provides accurate sentiment analysis and tracks sentiment trends for specific companies over time. It has broad applications in finance and politics, making it a valuable asset for investors and political staffers. Our user-friendly and cost-effective solution is an ideal solution for analyzing news articles and

investors and political staffers alike. With the ability to analyze large volumes of news articles, our tool accurately measures the sentiment of the content, ranging from positive to negative. For retail investors, our tool can be used to predict market trends and identify potential investment opportunities. By analyzing the sentiment of news articles related to specific stocks, investors can gain a better understanding of market sentiment and make more informed trading decisions. For political staffers, our tool can be used to gauge

decisions based on reliable sentiment analysis. Our use of Vader, Beautiful Soup, SQLite3, and Django enables us to provide accurate sentiment analysis and store large volumes of articles and their corresponding sentiment scores. The results column of our tool provides a reliable sentiment score for each article, ranging from positive to negative. With our NLP tool, users can quickly and easily analyze news articles to gauge public sentiment and identify potential investment opportunities.

issues by analyzing news articles related to the topic. This information can be used to shape political campaigns, influence policy decisions, and gain insights into the public's perception of various issues. Overall, our NLP tool is an effective and reliable way to extract sentiment from news articles and provide valuable insights for both retail investors and political staffers.

public sentiment on popular

Our NLP tool utilizes several technologies to analyze news articles and provide sentiment analysis. The sentiment analysis is carried out using Vader, a popular lexicon and rule-based tool. We extract the textual data from news articles using Beautiful Soup, a Python library for web scraping. SQLite3 is used to store the articles and their sentiment scores. We built our NLP tool as a web application powered by Django, a highlevel Python web framework. Django provides a robust set of tools and libraries for building web applications, allowing us to create a user-friendly interface and handle the backend processing. By using Vader, our tool assigns a sentiment score to each article, which ranges from positive to negative. This score is then stored in SQLite3, along with the article's textual data. The database allows for easy retrieval and analysis of the data. In summary, our NLP tool utilizes Vader for sentiment analysis, Beautiful Soup for web scraping, SQLite3 for database management, and Django for the web application front and backend. Together, these technologies enable us to provide reliable and valuable sentiment analysis from news articles --for retail-investors-and-political-staffers.---

**METHODS AND MATERIALS** 

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Figure 1: Landing Pagel.

CONCLUSIONS

analysis.

providing valuable sentiment

In conclusion, our NLP tool provides accurate sentiment analysis with a unique feature to track sentiment trends for specific companies, making it a valuable asset for retail investors and political staffers. Our cost-effective and user-friendly tool offers a clear and intuitive interface, requiring no technical expertise. Compared to other sentiment analysis tools, it provides reliable sentiment scores and has broad applications in finance and politics.



### CONTACT

Karan Dullat Email: karan.dullat1@ucalgary.ca



### **KEFEKENCES**

1. <u>https://sites.google.com/view/scientiasoftware/ho</u> <u>me?authuser=0</u>