

Aaron Galloway Hunter Norris Shana Zaman Brandon Srinath Shrey Dudhia

Overview

Analyze news headlines from 2020 and create a tool to determine the impact of current articles on the DJIA, S&P 500, & Russell 2000

Data Sources

Guardian API searching headlines from articles related to American Politics, The US Economy, US Stock Market, US President, and Cryptocurrency/Bitcoin/Ethereum

Using **Google Finance** Data we extracted closing price data for DJIA, S&P 500 and Russell 2000

Sentiment Analysis

Using **VADER** we created compound sentiment scores of headlines from The Guardian API.



Making Sense Of It All

We combined headlines from The Guardian API with the sentiment scores then merged Stock Market Data from Google Finance, Headlines and the Compound Sentiment score into one dataframe.

Creating Models

3 Models were created (All 2 Hidden Layers)

- DJIA
- S&P 500
- Russell 2000

All models saved and exported to end-user dashboard

Dashboard

Created a Plotly Dash dashboard that allows a user to input text and project impact on the DJIA, S&P 500, and Russell 2000