

From Truth Social to Trade Floor

Unraveling the Hidden Complexity of Trump Posts on Stock Market

Objective

This presentation introduces audiences to the intersection of technology, finance, and real-world events. It demonstrates how data from nontraditional sources—like social media posts by influential figures—can impact stock markets, and how Python, AI models, and public APIs can be used to analyze and interpret those effects. The session highlights the promise and challenges of using machine learning and alternative data in modern trading and market analysis.

Outline

0. Conventional Data vs Alternative Data

1. Building a Modern Data Pipeline: From Web Scraping to Market Data

- Learn how to use Python to extract social media posts (e.g., from Truth Social).
- Use the OpenAI API to analyze text for sentiment and topic detection.
- Pull historical stock market data using cost-effective APIs like polygon.

2. Case Study: How Trump's Posts Influenced Market Behavior

- Analyze the impact of two specific Trump posts on April 9, 2025.

3. Why Alternative Data Matters in Event-Driven Trading

- Demonstrate how trading signals can emerge before mainstream news coverage.
- Show that information gaps between post time and media reporting can create opportunities in markets.

4. The Hidden Complexity of Translating Posts into Tradeable Signals

- Explore the challenges of turning text into financial predictions.
- Show that even powerful models (like GPT-4) struggle to consistently predict market reactions from sentiment or topics alone.
- Emphasize that **context, nuance, and market foresight** are critical—beyond just reading sentiment labels.

0. Conventional Data vs Alternative Data

Conventional Data

- **Market Data** (e.g. stock price)
- **Financial Statements** (e.g. earnings report)
- **Macroeconomic Indicators** (e.g. GDP, CPI, PPI)
- **Analyst & Broker Data** (e.g. Research Report)
- **Corporate Actions** (e.g. M&A announcements)

Alternative Data

- **Web & Social Media Data**
- **Geolocation & Mobility Data**
- **Satellite & Aerial Imagery**
- **App & Web Usage Data**
- **Supply Chain & Shipping Data**
- ...

1. Cost Breakdown of the Data Pipeline

- **Web Scraping**
 - <http://scrapecreators.com/>
 - Pay as you go (~2000 posts, ~100 pages, \$1)
- **Topic Modeling and Sentiment Analysis with LLM**
 - <https://openai.com/api>
 - Pay as you go (~1700 API calls, \$1)
- **Stock Market Data**
 - <https://polygon.io/>
 - Polygon offers free tier (5 API Calls / Minute), \$29/month tier (unlimited API Calls)
- **Python Jupyter Environment**
 - <https://colab.research.google.com/>
 - Google Colab offers a free tier that provides access to cloud-based Jupyter Notebooks and computational resources, including GPUs
 - Code reference link:
https://github.com/ZenithSun/Presentations/blob/main/Truth_Social_Posts_Analysis_for_Share.ipynb

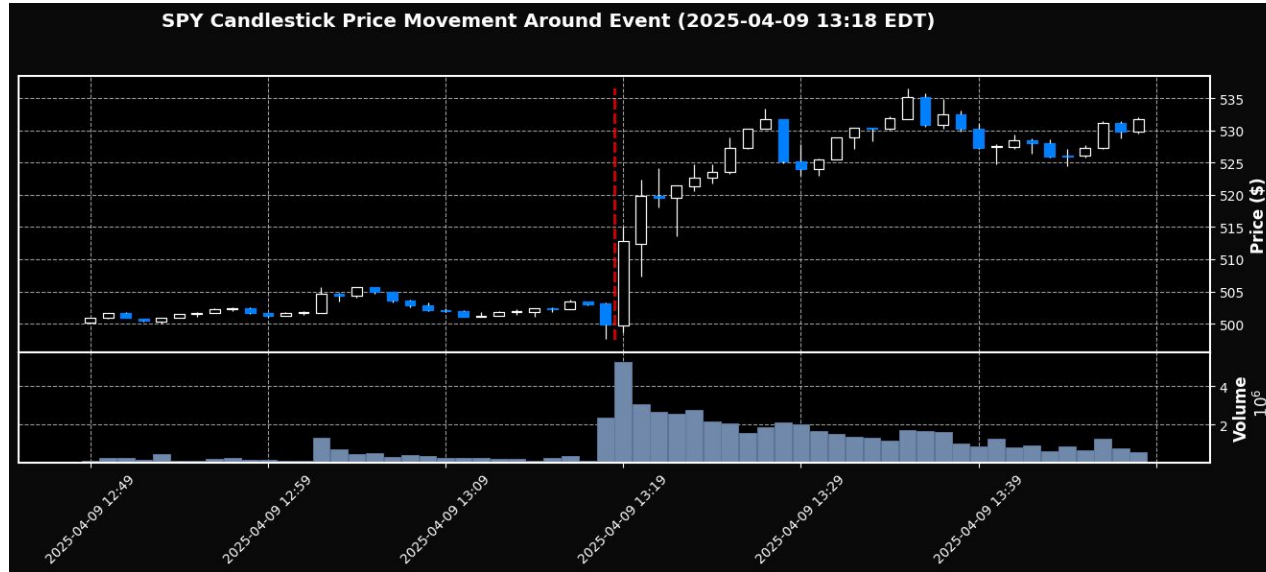
2. How Trump Post Roiled the Stock Market

Example 1:



2. How Trump Post Roiled the Stock Market

Example 2:



← **Truth Details**
7942 replies Trending ...

 **Donald J. Trump** 
@realDonaldTrump

Based on the lack of respect that China has shown to the World's Markets, I am hereby raising the Tariff charged to China by the United States of America to 125%, effective immediately. At some point, hopefully in the near future, China will realize that the days of ripping off the U.S.A., and other Countries, is no longer sustainable or acceptable. Conversely, and based on the fact that more than 75 Countries have called Representatives of the United States, including the Departments of Commerce, Treasury, and the USTR, to negotiate a solution to the subjects being discussed relative to Trade, Trade Barriers, Tariffs, Currency Manipulation, and Non Monetary Tariffs, and that these Countries have not, at my strong suggestion, retaliated in any way, shape, or form against the United States, I have authorized a 90 day PAUSE, and a substantially lowered Reciprocal Tariff during this period, of 10%, also effective immediately. Thank you for your attention to this matter!

17k ReTruths **78.2k** Likes Apr 09, 2025, 1:18 PM

3. Why Alternative Data Matters in Event-Driven Trading

SPY Around Trump Post & Bloomberg Report
Trump: 2025-04-09 13:18 EDT | Bloomberg: 2025-04-09 13:25 EDT



Trump Puts 90-Day Pause on Higher Tariffs, But Hikes China Rates



WATCH: President Donald Trump said he would raise duties on China to 125% while pausing reciprocal tariffs on dozens of non-retaliating countries for 90 days. Source: Bloomberg

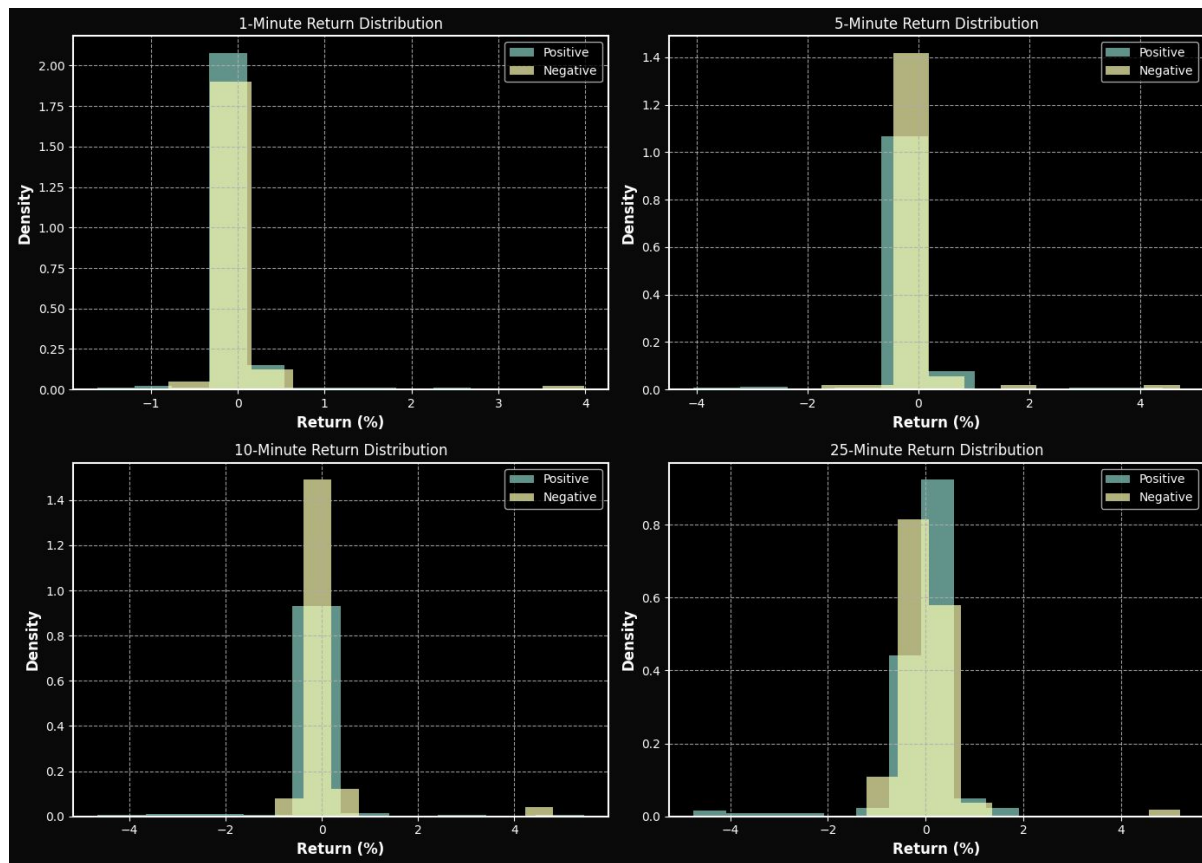
By Skylar Woodhouse and Josh Wingrove

April 9, 2025 at 1:25 PM EDT

Updated on April 10, 2025 at 12:08 AM EDT

4. The Hidden Complexity of Translating Posts into Tradeable Signals

Return Distribution:



4. The Hidden Complexity of Translating Posts into Tradeable Signals

Trading Volume Change Distribution:

