

The Dance of Stocks: Nvidia, Tesla and Apple

In the exciting world of stock market, fortunes can change in an instant. Each stock symbol(ticker) tells a story – it represents a company's ideology, philosophy and strategy. Today, I'll take a closer look at three major players: Nvidia (NVDA), Tesla (TSLA), and Apple (AAPL).

My journey begins at **Yahoo Finance**, with the power of **Python**, using **requests** and **BeautifulSoup** to capture the real-time rhythms of the most active stocks. The mission is clear: scrape the most active stock symbols, retrieve their real-time data at one-minute intervals, and save this goldmine into a CSV file for detailed analysis.

The Day Unfolds

As the opening bell rings at 9:30 a.m., Traders and investors watch in anticipation as stock prices begin their daily ballet of fluctuating. I start tracking the movements of Nvidia, Tesla, and Apple.

Metrics of Movement

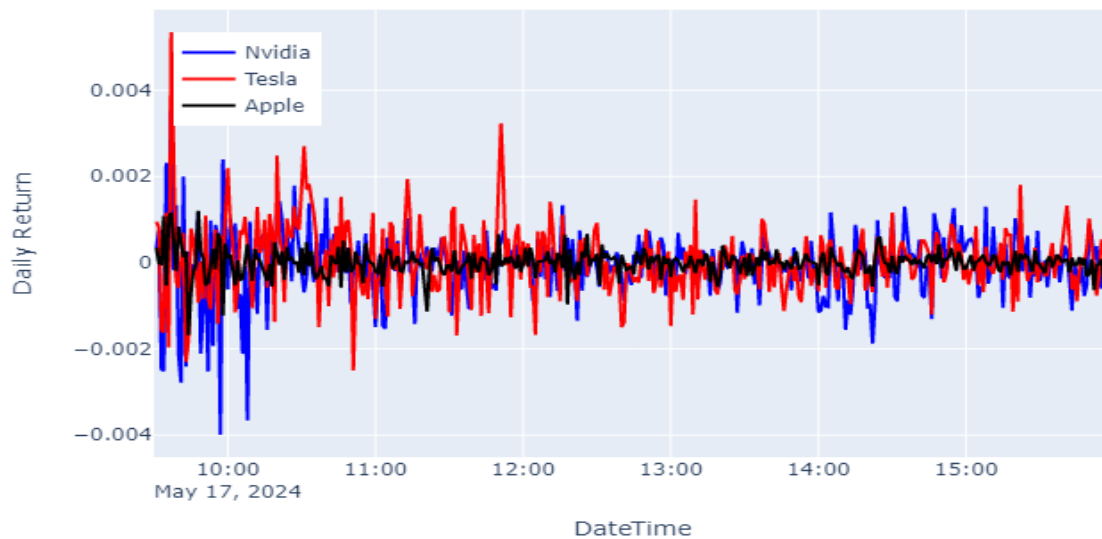
To understand how these stocks perform, three important metrics were calculated:

- **Daily Return:** The percentage change in the stock's price from the start to the end of the day.
- **Cumulative Return:** The total percentage change over the day, considering compounding effect of returns.
- **Volatility:** How much the stock's price fluctuates, measured by using standard deviation.

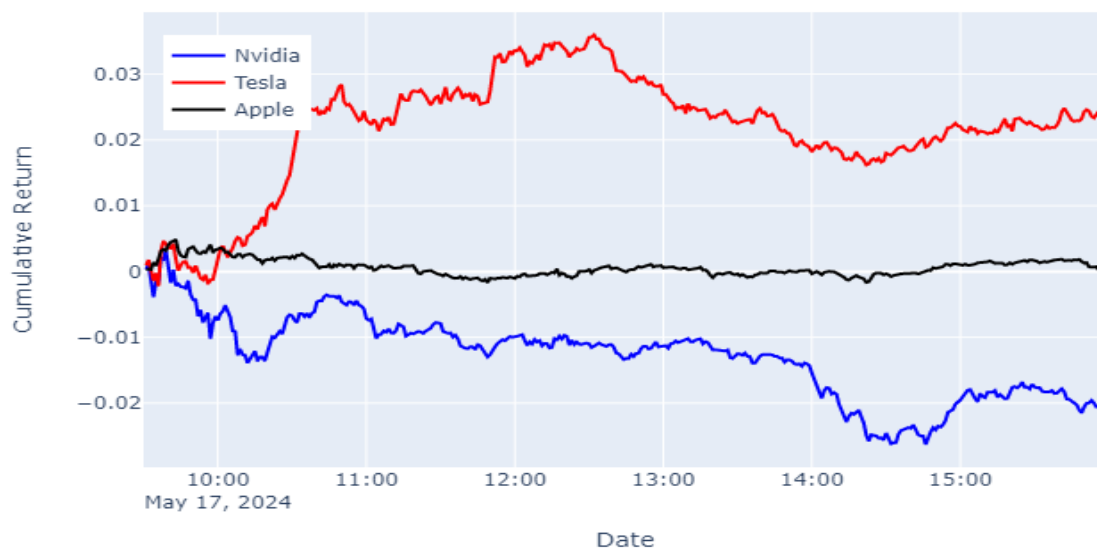
Visualizing the Dance and Unveiling the Findings

Charts come alive, displaying the rhythmic fluctuations of daily returns, cumulative returns, and volatility. These visualizations reveal the hidden patterns and movements of the three stocks.

Daily Returns for Nvidia, Tesla and Apple (1 Day))



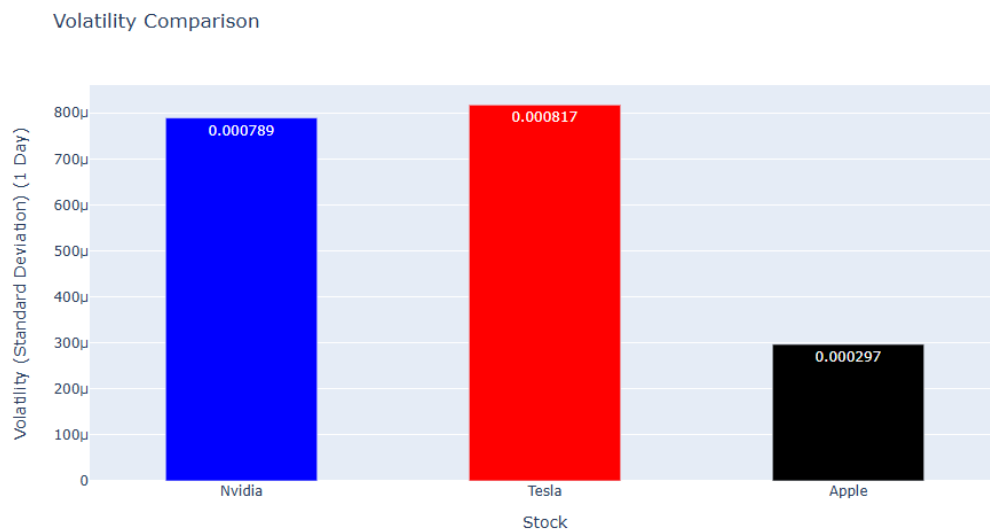
Cumulative Returns for Nvidia, Tesla and Apple (1 Day)



Finding of Cumulative Returns:

- Tesla (TSLA): Tesla soars high, showcasing a remarkable cumulative return throughout the day.
- Apple (AAPL): Apple maintains a steady, moderate return, reflecting stability and consistency.
- Nvidia (NVDA): Nvidia faces a challenging day with negative cumulative returns, reminding us of the inherent risks in the market.

Volatility



Findings of Volatility Comparison:

- Tesla (TSLA): With the highest volatility at 0.000817, Tesla's performance is marked by large, frequent price movements.
- Nvidia (NVDA): Nvidia shows moderate volatility at 0.000789, balancing risk and stability.
- Apple (AAPL): Apple exhibits the lowest volatility at 0.000297, embodying stability and less frequent price fluctuations.

Implications for Investors

Short-term Traders:

- Tesla: High volatility makes Tesla appealing for traders looking to profit from quick price changes. However, the high risk means they need to be careful.
- Nvidia and Apple: Nvidia's moderate volatility offers some trading opportunities, while Apple's stability is less attractive for short-term gains.

Long-term Investors:

- Apple: Apple's low volatility makes it a safe choice for long-term investors seeking steady growth.
- Nvidia: Nvidia offers a balanced option with moderate risk and potential for growth.
- Tesla: Long-term investors in Tesla should be ready for significant price swings. While there's potential for high returns, there's also a higher risk.

Diversifying Your Portfolio

A savvy investor knows the value of balance including both high and low volatility stocks which can help manage risk while maximizing returns. Tesla could inject growth potential into a portfolio; while Apple provides stability, and Nvidia offers a middle ground, making for a diversified and resilient investment strategy.

Conclusion

As the closing bell rings at 4 p.m., I gain valuable insights from the analysis of Nvidia, Tesla, and Apple stocks. Tesla, with its high-flying returns and volatility is ideal for those seeking adventure and willing to take on more risk. On the other hand, Apple stands as a pillar of stability, promising steady growth, and making it a solid choice for cautious investors. Nvidia, balancing between the two (Tesla and Apple), provides a harmonious blend of potential and risk, appealing to those with moderate risk tolerance.

The stock market is a dynamic stage where each day brings new stories, lessons, opportunities and challenges. Whether you prefer the thrill of Tesla, the stability of

Apple, or the balanced approach of Nvidia, there is a place for every investment strategy in the world of stocks.