



# Unlocking Meta's Stock Potential

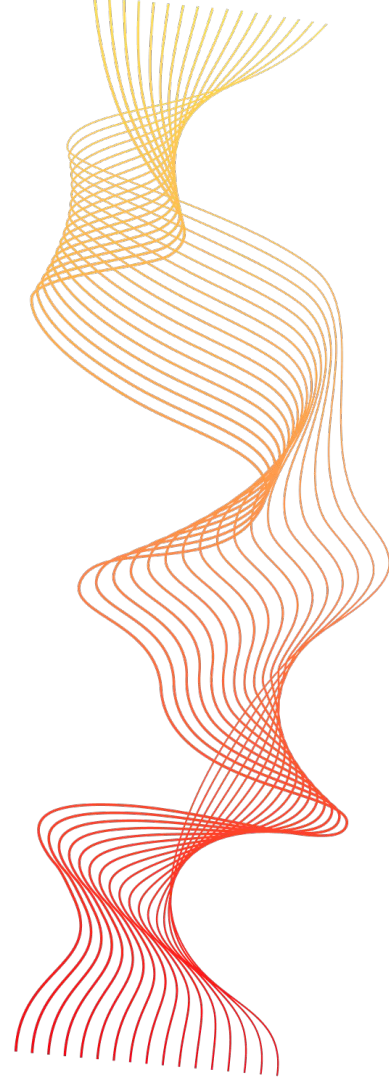
■ Technology and IT

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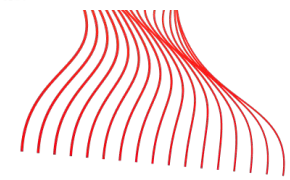
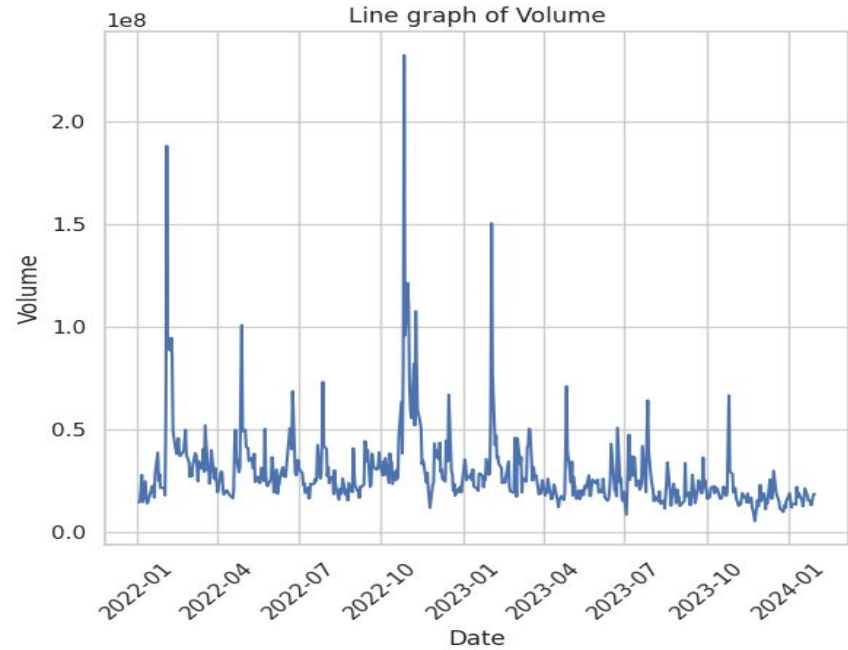
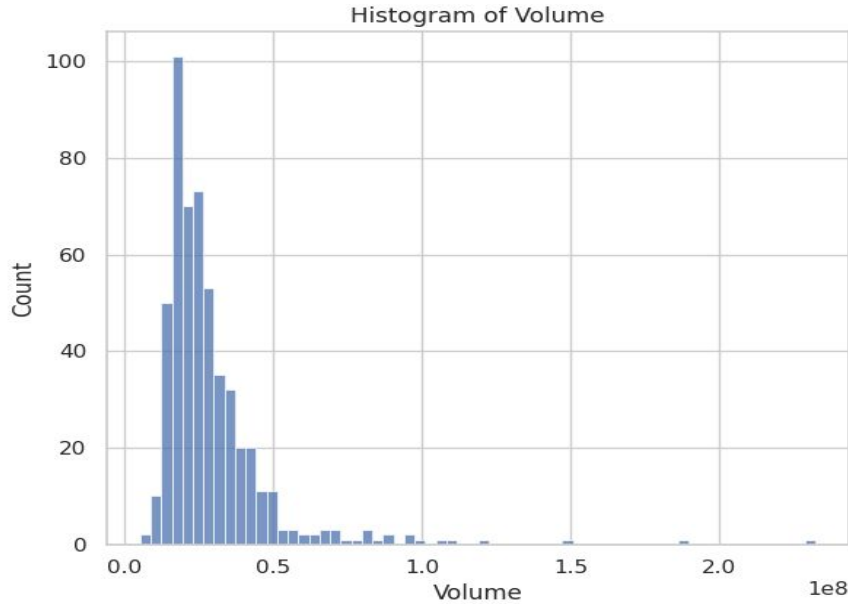
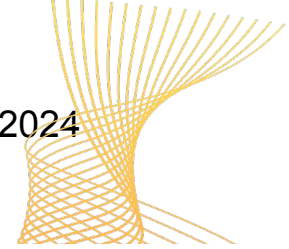
# Meta Analysis and History

- Meta Platforms, Inc. develops products facilitating global connectivity through various devices
- Operating in two segments, "Family of Apps" includes Facebook, Instagram, Messenger, and WhatsApp, enabling sharing, communication, and transactions.
- The "Reality Labs" segment focuses on augmented and virtual reality, providing hardware, software, and content for immersive experiences.
- Formerly known as Facebook, Inc., it rebranded as Meta Platforms, Inc. in October 2021.
- Established in 2004, the company is based in Menlo Park, California.



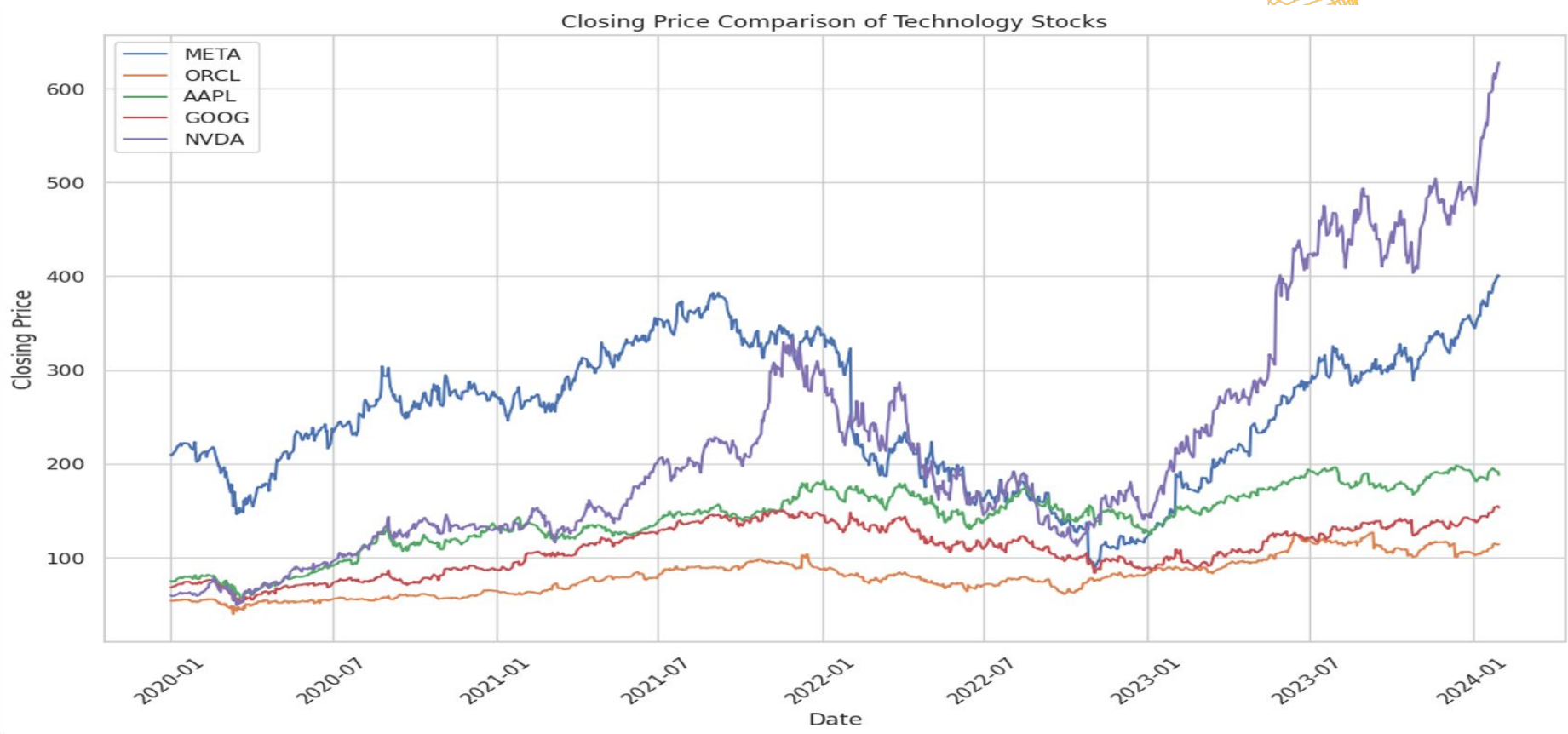
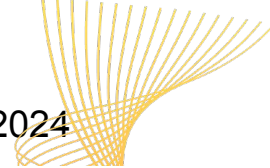
# EXPLORATORY DATA ANALYSIS

The analysis focuses on the period from Jan 1, 2020 to Jan 31, 2024



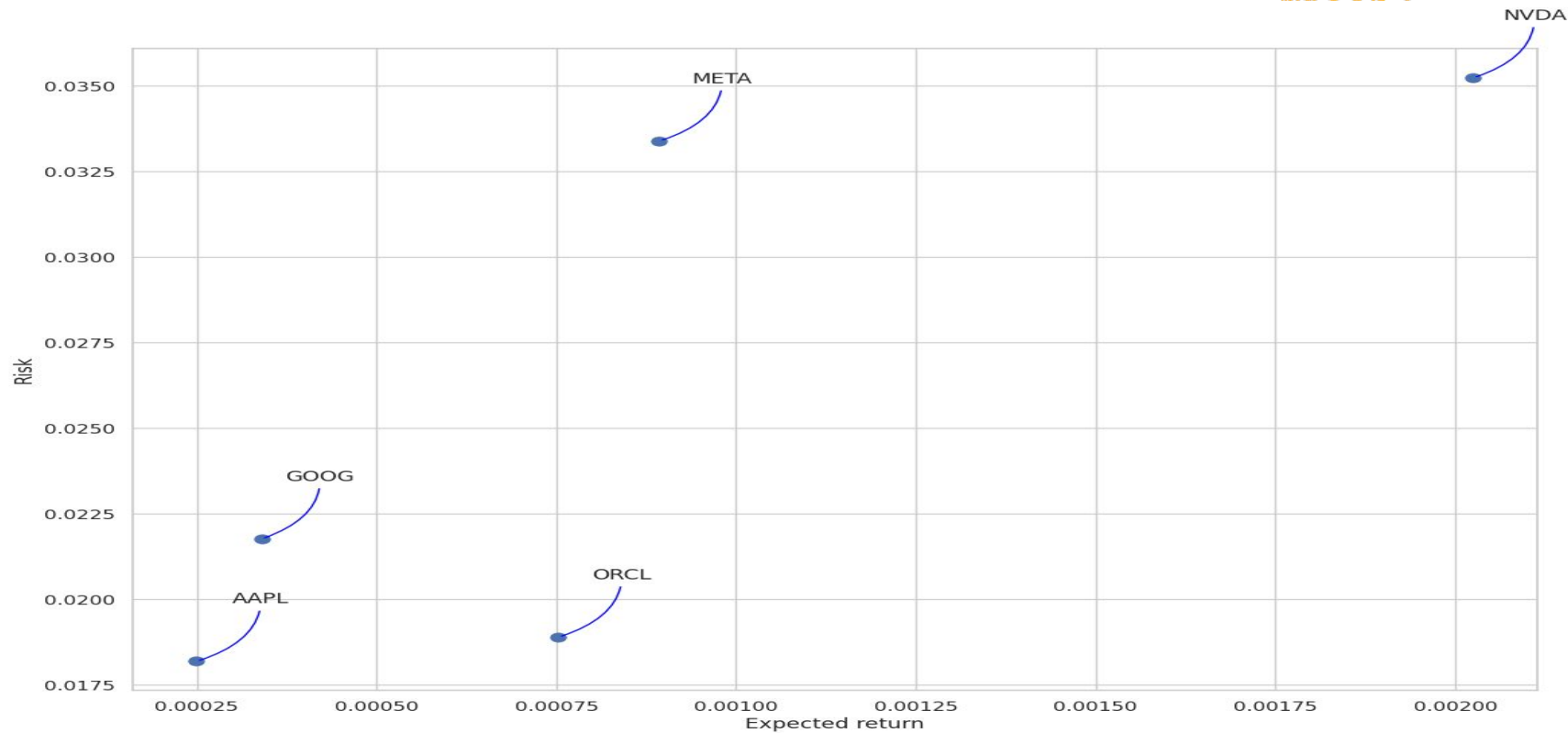
# Competitors Of Meta

The analysis focuses on the period from Jan 1, 2020 to Jan 31, 2024



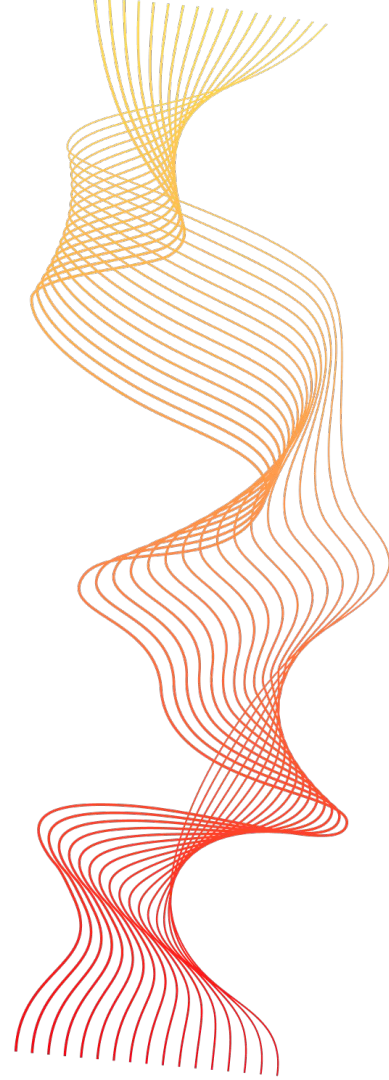
# Expected Return with competitors

The analysis focuses on the period from Jan 1, 2020 to Jan 31, 2024



# Feature Mart

- ▶ FRED
- ▶ Fama-French website
- ▶ ADS
- ▶ CAPM, momentum factors
- ▶ Volume
- ▶ Price/return lags



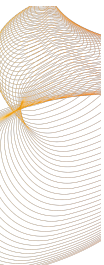
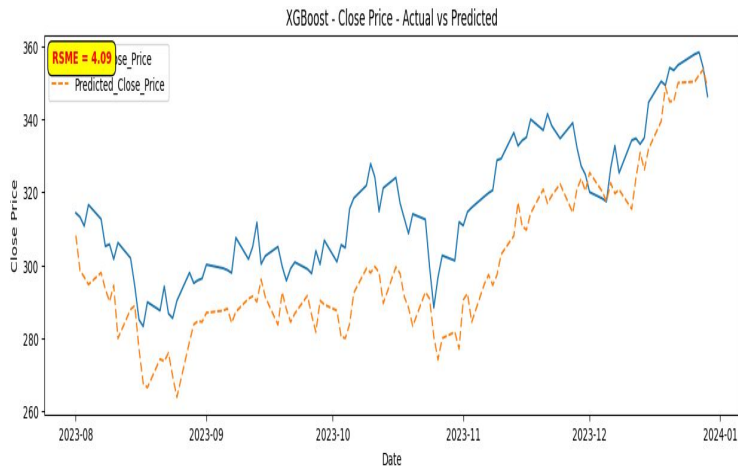
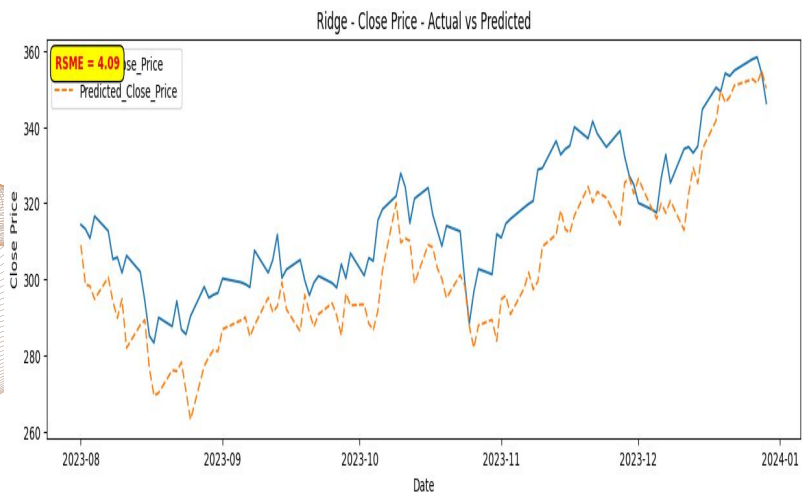
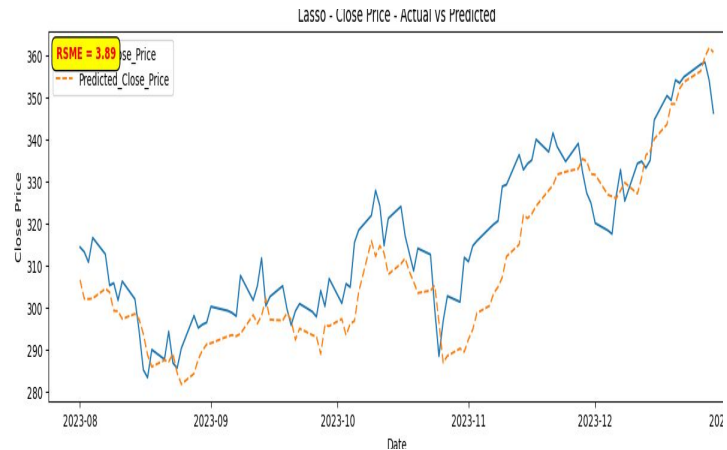
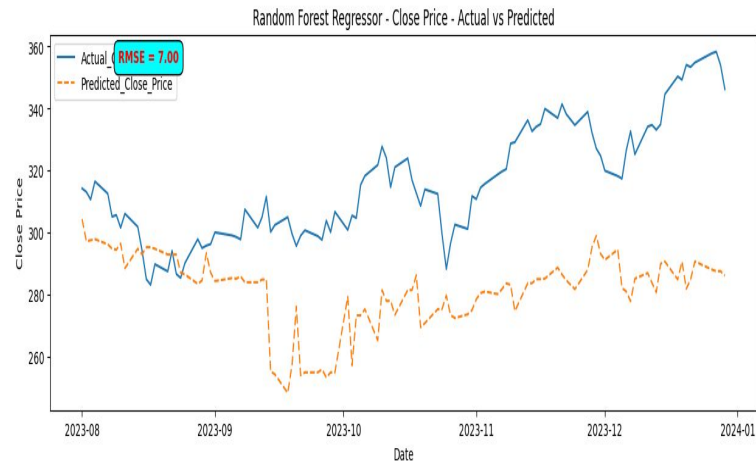
# FEATURE IMPORTANCE

- ▶ Elastic Net
- ▶ Lasso
- ▶ OLS Regression
- ▶ XGBoost

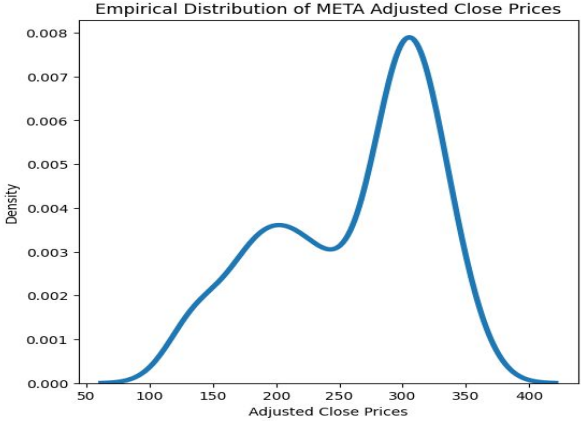
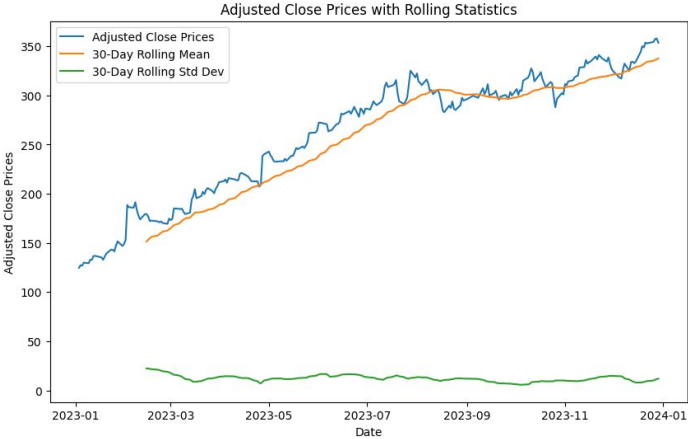




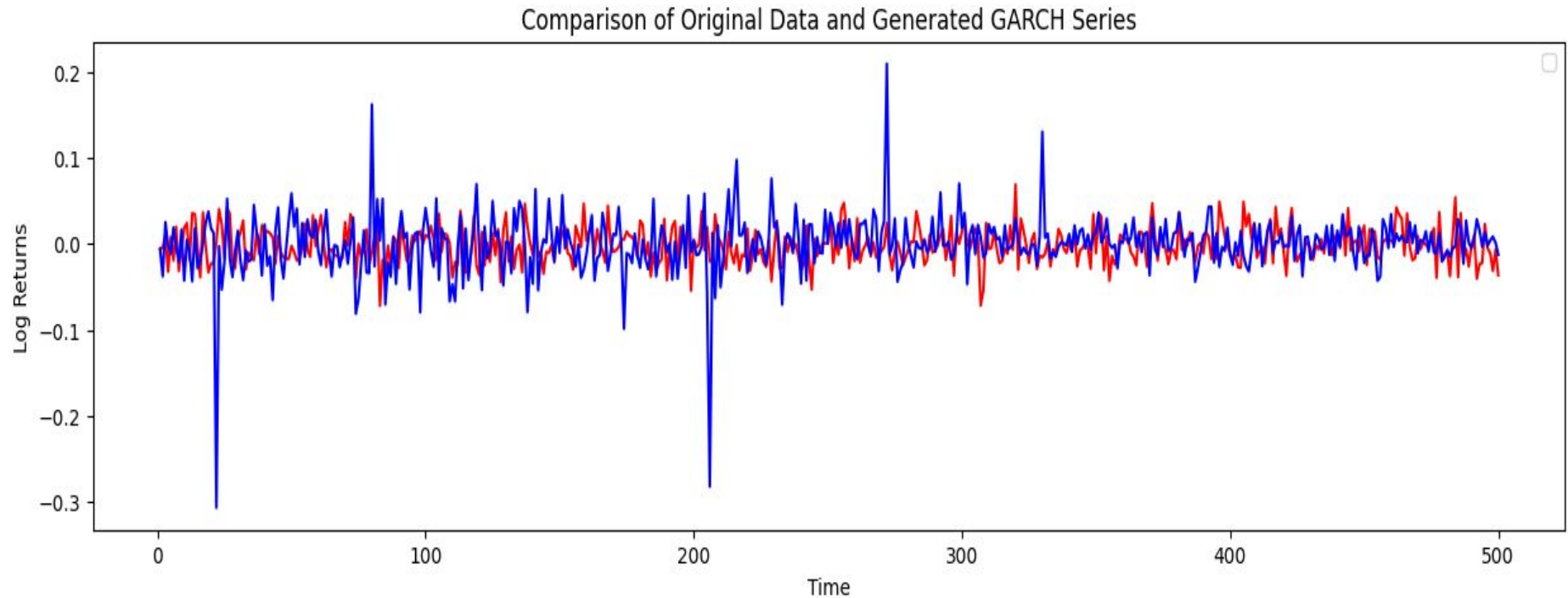
# Model Training



# Benchmark Study using Kalman Filter



# Benchmark Study using GARCH





# Trading Strategies

## Strategy Overview:

The trading algorithm evaluates predicted and actual closing prices of stocks to make buy and sell decisions.

## Buy Decision:

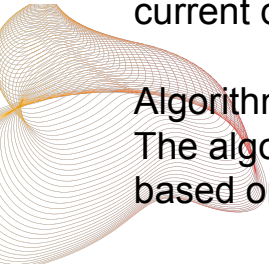
If the predicted closing price for the next day is higher than the actual closing price for the current day, the algorithm buys stocks.

## Sell Decision:

If the predicted closing price for the next day is lower than the actual closing price for the current day, and the algorithm already owns stocks, it sells them.

## Algorithm Execution:

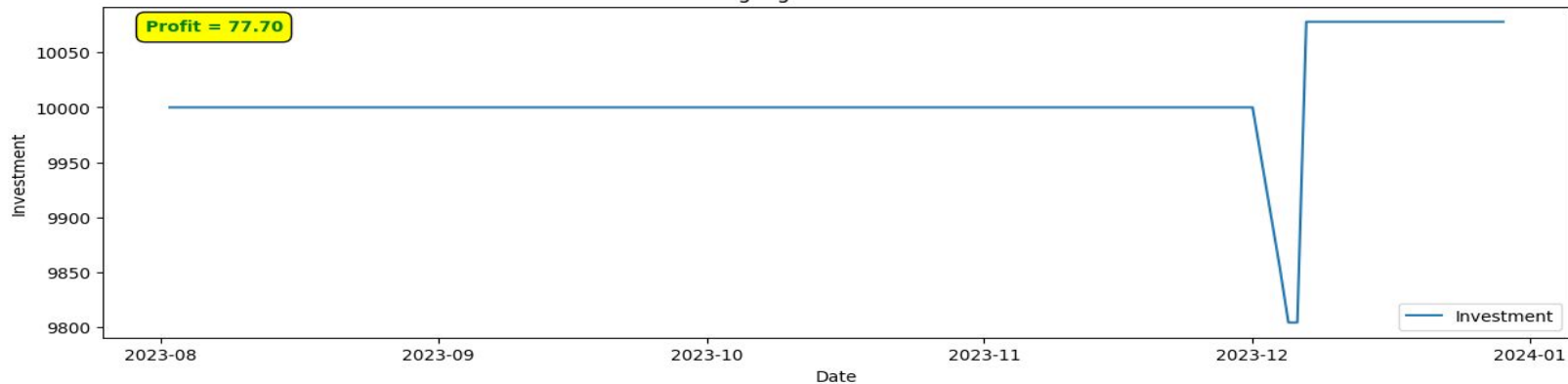
The algorithm repeats this process for each day in the dataset, making buy or sell decisions based on the predicted versus actual price comparison.



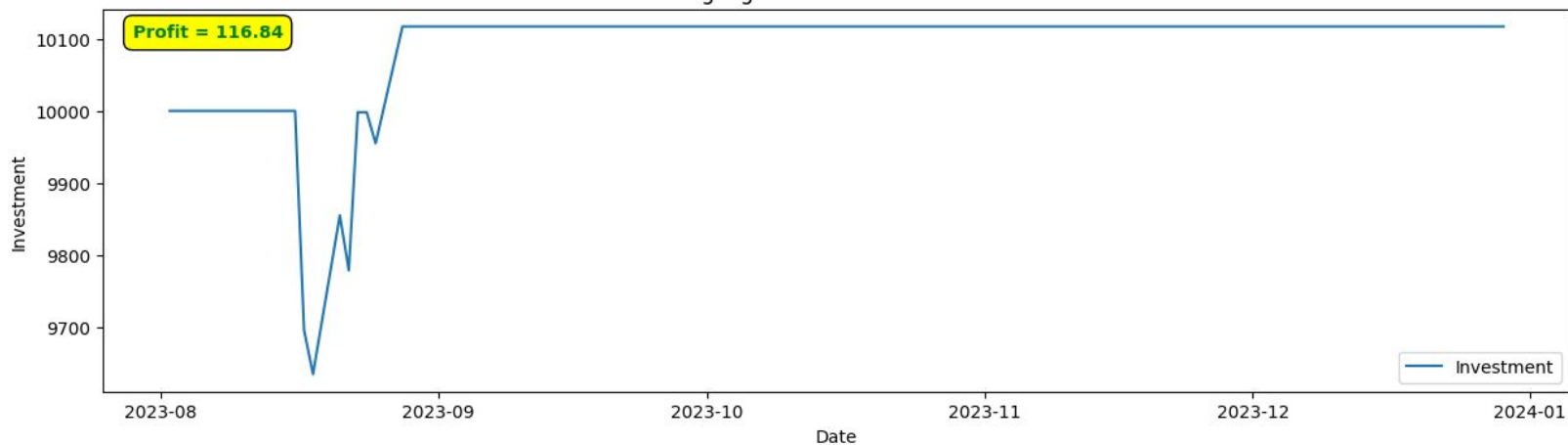


# Trading Strategies

Trading Signal Result- XGBoost

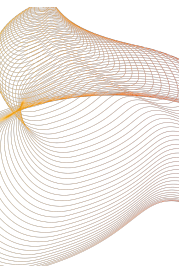
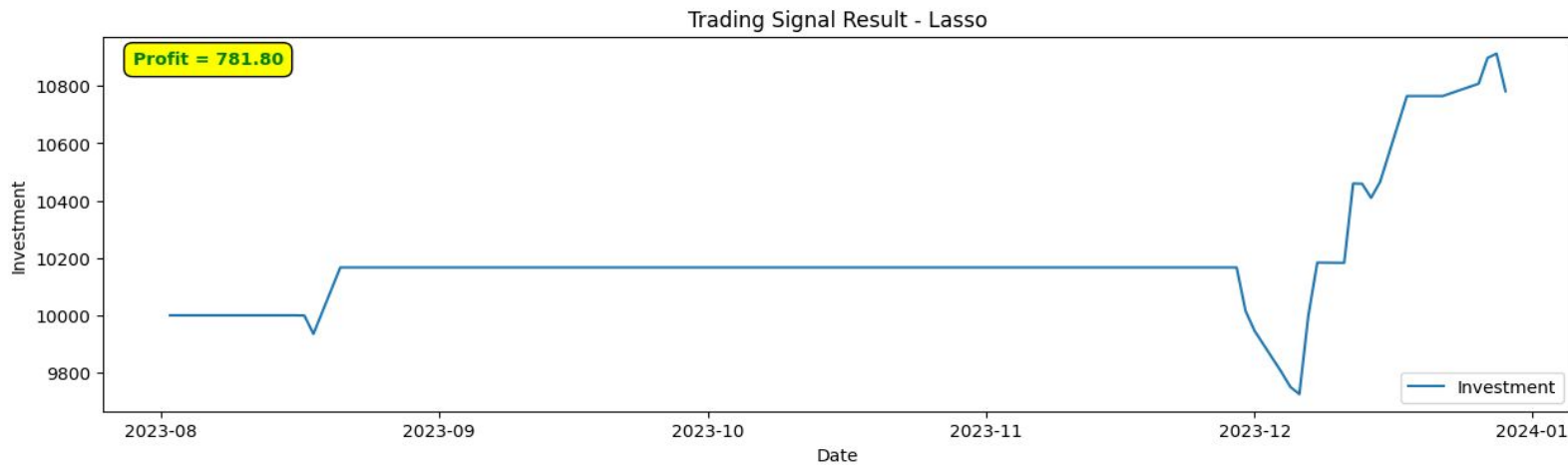
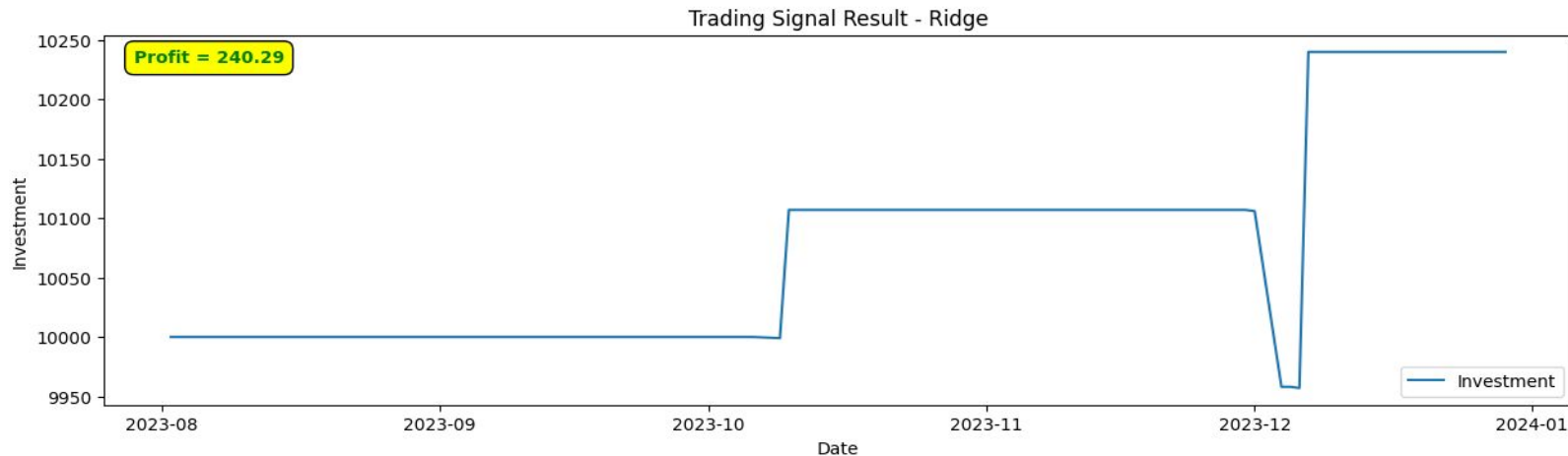


Trading Signal Result - Random Forest





# Trading Strategies



# Conclusion

META

Current Stock Price: 481\$

it's important to recognize that while our analysis provides valuable insights, it's not a crystal ball for predicting the future of the stock market. Market dynamics are influenced by a multitude of factors, including economic indicators, geopolitical events, and investor sentiment, which can be challenging to fully capture and model accurately.



# References:

- "Technical Analysis of the Financial Markets: A Comprehensive Guide to Trading Methods and Applications" by John J. Murphy
- "Trading for a Living: Psychology, Trading Tactics, Money Management" by Dr. Alexander Elder
- MetaStock Website - The official MetaStock website often provides tutorials, articles, and resources for users to learn about the platform and its features.
- Investopedia - Investopedia offers a wealth of information on stock analysis techniques, including technical analysis, fundamental analysis, and various trading strategies.
- StockCharts.com - StockCharts.com is a popular website for technical analysis tools and resources. It provides tutorials, articles, and charting tools that can be helpful for MetaStock users.