Post Earnings Announcement Drift Trading Dashboard

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OVERVIEW

We made an algorithm to predict how companies do on their quarterly financial reports and simulated its results historically.

Technologies Used: Python, TraderWorkstation (IBKR), JavaScript, Backtrader, HTML , CSS , Numpy, Pandas

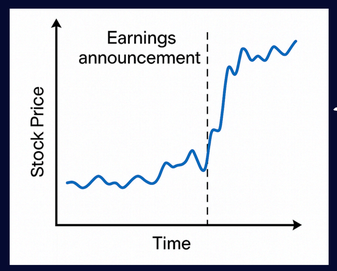
Challenges: Inconsistent Reporting Locations, Assumption Validities, Sparse Data , and Underfitting

Findings: The strategy achieved an average Sharpe ratio of 0.5, with capital being locked for only approximately 8 hours per year, which is considerably efficient.
Additionally, we observed that performance was sector-dependent, yielding the highest returns in the technology sector while underperforming in banking stocks

PROBLEM

NEW ANALYSTS

Viewing Suprises in stock price once earnings reports are released



How to capitalize on it??

SOLUTION

Collected Balance Sheets, Income Statements, and Cashflow statements data from AlphaVantage API and collected earnings dates data from Yfinance for the past 10 years.

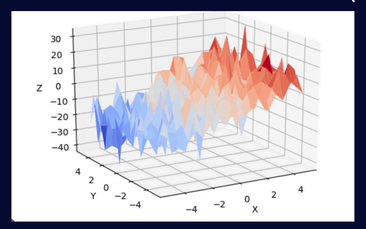
Collected Earning Reports from IBKR API for past 10 years, including Analyst Estimates.

Financial Data was cleaned, preprocessed, and checked for multicolinearity. Also made sure that the data for each earning date was available and matched with data collected from IBKR

PERFORMED BACKTESTING ON 10 YEARS OF HISTORICAL DATA

Sent Predictions for each earnings date via CSVs

Multi-Variate Regression



Got Equity Curves, Sharpe Ratio Comparisons, and Trade History from Backtest Results

Populated Results on our dashboard