# Are Election Periods the Best Time to Invest?



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# Why Index Funds?

Importance → Reliability

**Major Indices in U.S**

- World Players
- Accessable
- Stable

**Structured Datasets**

- No Nested Lists
- Clean Data
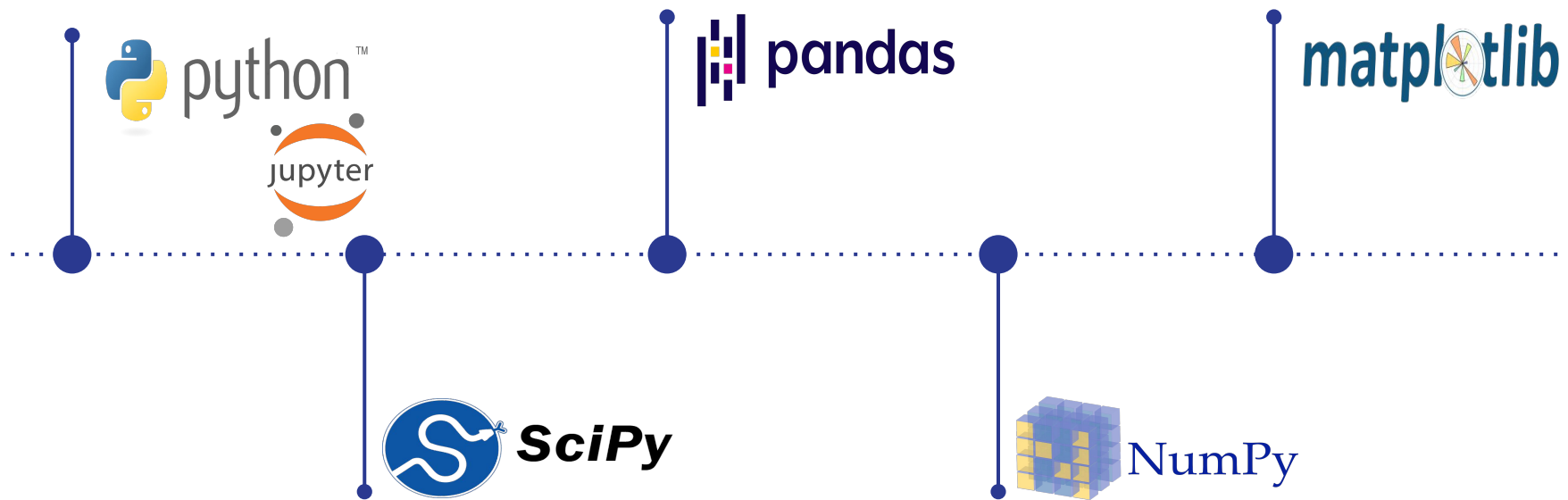


Dow Adjusted Closing Price

# Data Collection

Yahoo Finance Datasets:

- Dow:        9000+ entries, 7 columns
- Nasdaq: 12000+ entries, 7 columns
- SP500:    23000+ entries, 7 columns

Time Frames:

- Dow:          1985 - 2020
- Nasdaq:     1971 - 2020
- S&P500:     1927 - 2020

# Tech Stack Tools

# Null Hypotheses

The mean price returns after presidential elections is different than before elections.

# Alt. Hypotheses

The mean price after presidential elections is **not** different than before elections.
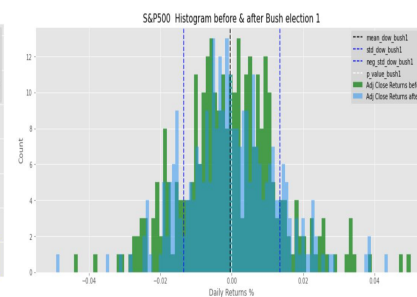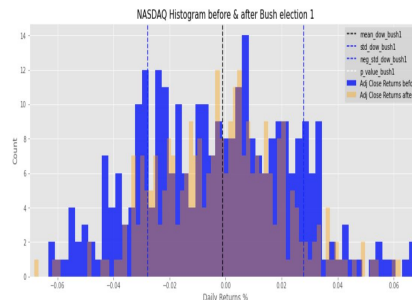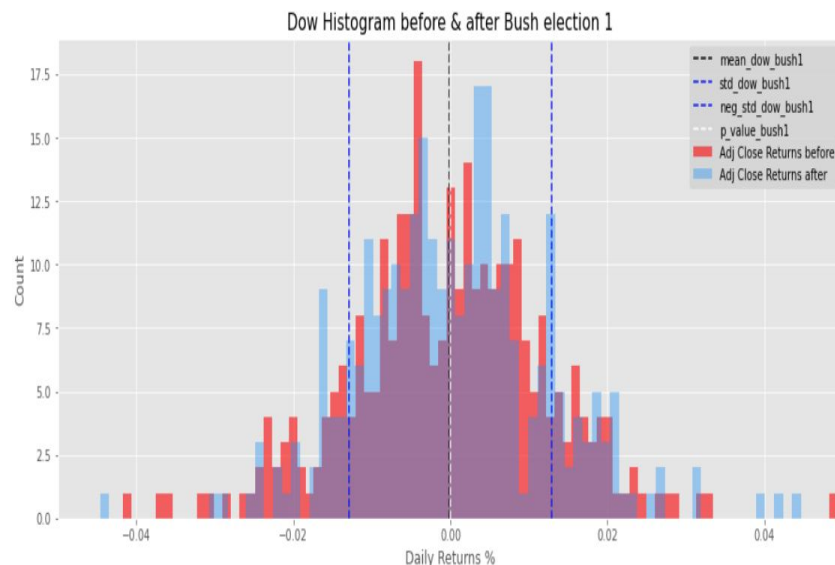
# What Does the Data Say?

Significance Level:  0.01
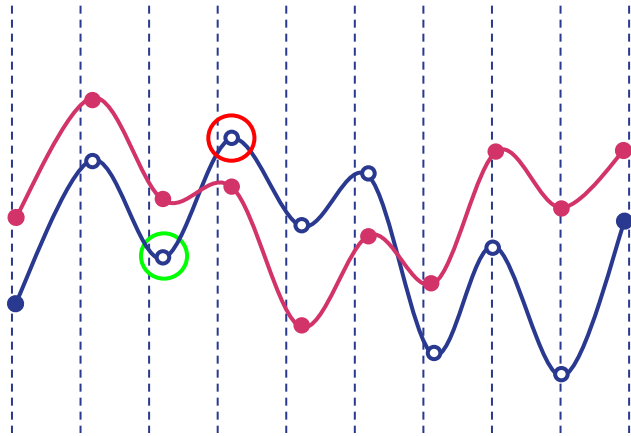
Test Conducted:      Welch's t-test

| -------------- | Dow | Nasdaq | S&P500 |
|---|---|---|---|
| Clinton | FTR | FTR | FTR |
| Bush 1 | FTR | R | FTR |
| Bush 2 | FTR | FTR | FTR |
| Obama 1 | R | R | R |
| Obama 2 | R | R | R |
| Trump 1 | FTR | FTR | R |

FTR= Failed to Reject H_o,  R= Rejects H_o



{'P-value failed to Reject our Null Hypotheses': 10, 'P-value rejects our Null Hypotheses': 8}

# Future Development



- **Test for correlation across markets**

- **Add other major indices, cryptocurrencies, bonds and etc.**

- **Integrate future prediction models**

# Thank You!

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