PROJECT 3
STOCK MARKET STATISTICS

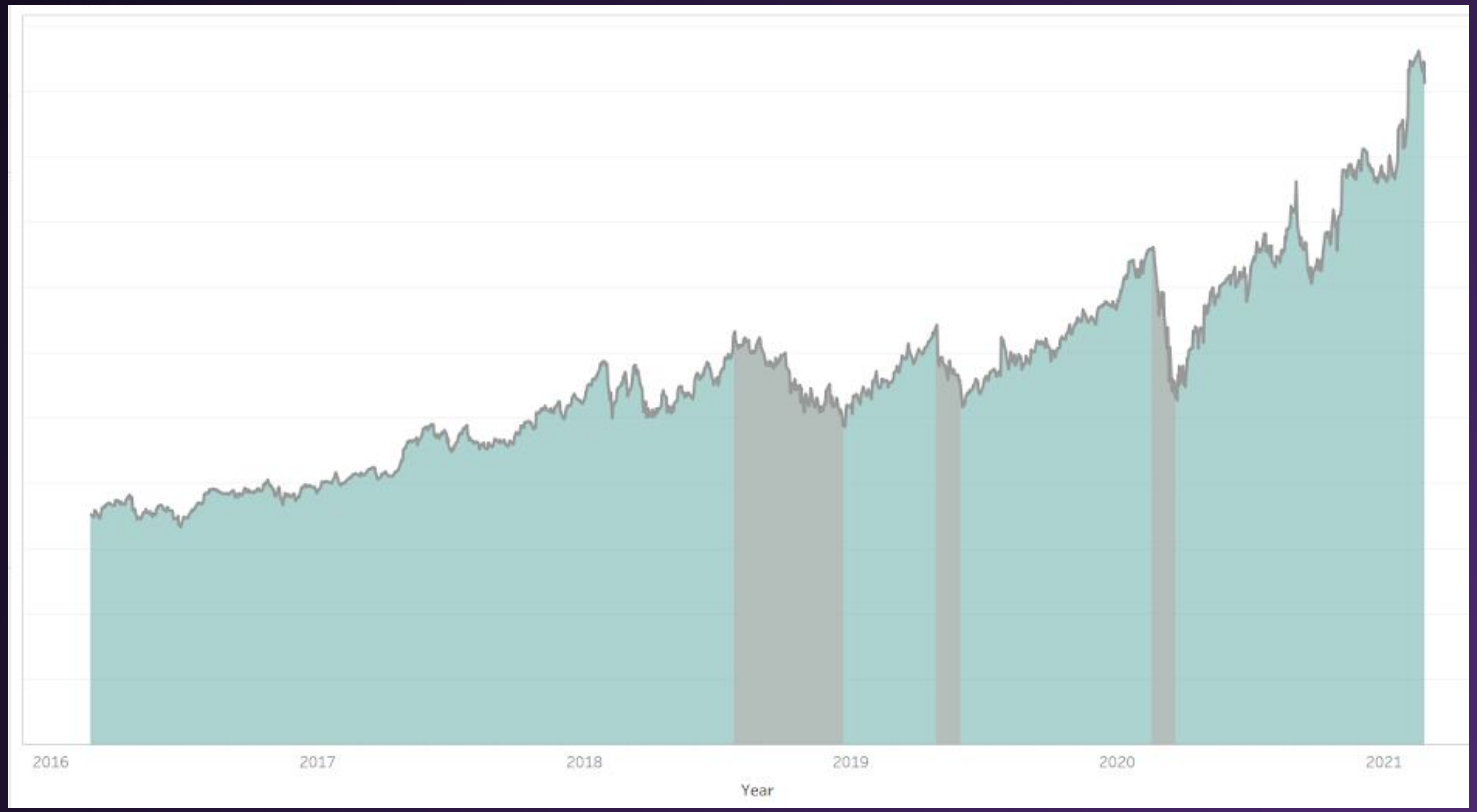
“Don't blindly follow someone, follow market and try to hear what it is telling you.”

Jaymin Shah

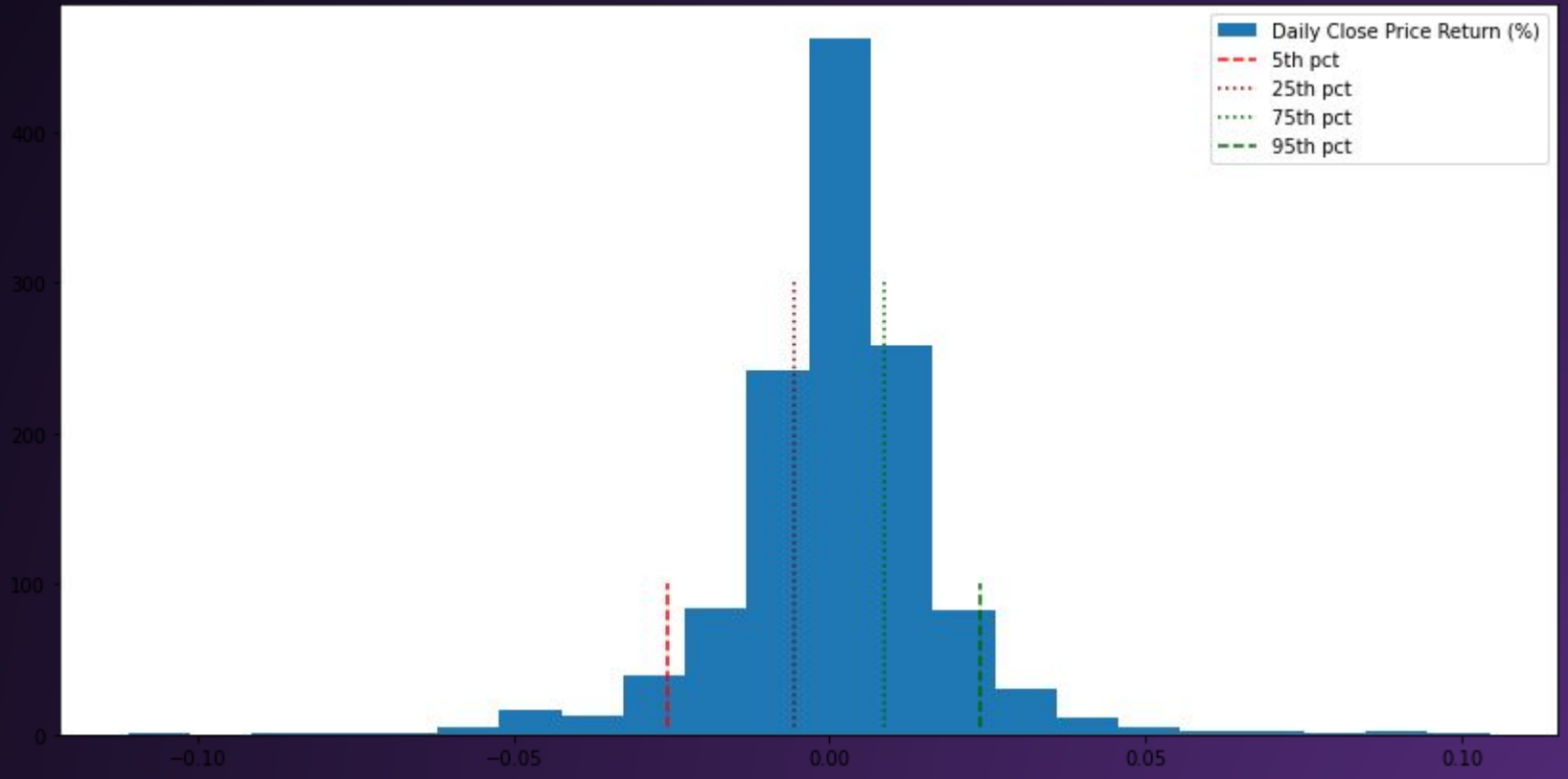
THIS PROJECT AIMS TO CHECK :

- How daily returns are distributed
- Correlation between stocks
- How can correlation help us investing

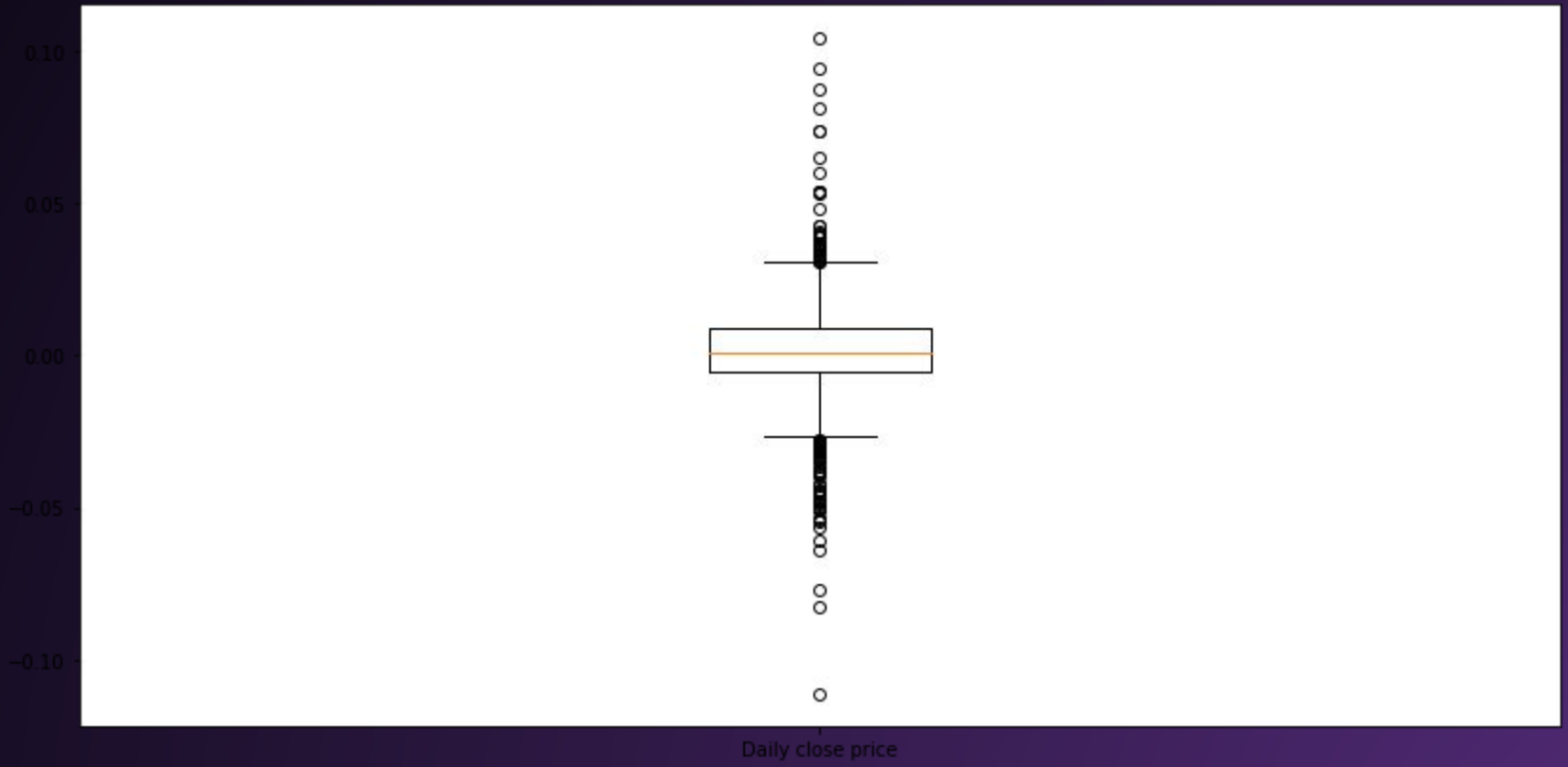
Google Daily Returns Distribution



Over the past five years, Google only had three bear market seasons



Most observations around zero, and seems to be symmetric



After doing a boxplot we can confirm that we have a lot of outliers

AFTER PERFORMING SOME TESTS WE CONCLUDED

Negative Skew

The Skew is -0.0885

Median > Mean

Leptokurtic Kurtosis

The Kurtosis is 6.67

Heavy-tailed or profusion of outliers

p-value is: 5.491755297105162e-41

Kurtosis shows high risk, since outliers are more common

Shapiro Test Rejects NO

p-value is: 1.1243565148637083e-26

Correlation between Stoks

HOW SP500 CORRELATE WITH:

- APPLE 0.92
- GOOGLE 0.98
- TESLA 0.74
- MICROSOFT 0.94

*Values based on Pearson Correlation

A STRATEGY BASED ON CORRELATION CAN

Simplify Investments

We only need to follow one stock, SP500, to know quickly our performance

Improve Returns

SP500 historically has great performance

+100% change last 5y

+3600% since 1971

*This is not a financial advice, and all the conclusions have only academic purposes

*Free Tip: Never invest money that you can't afford to lose!

Tableau Project Link: HERE