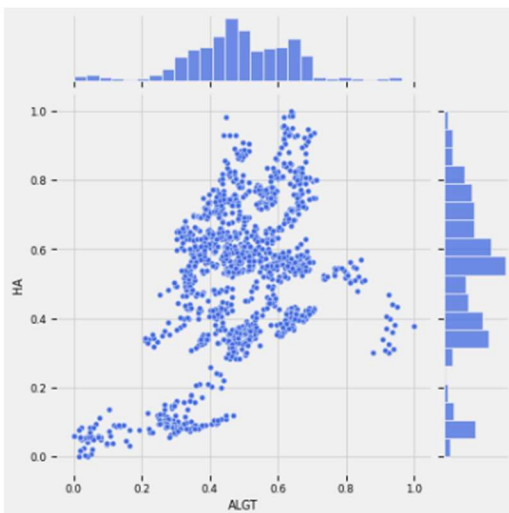


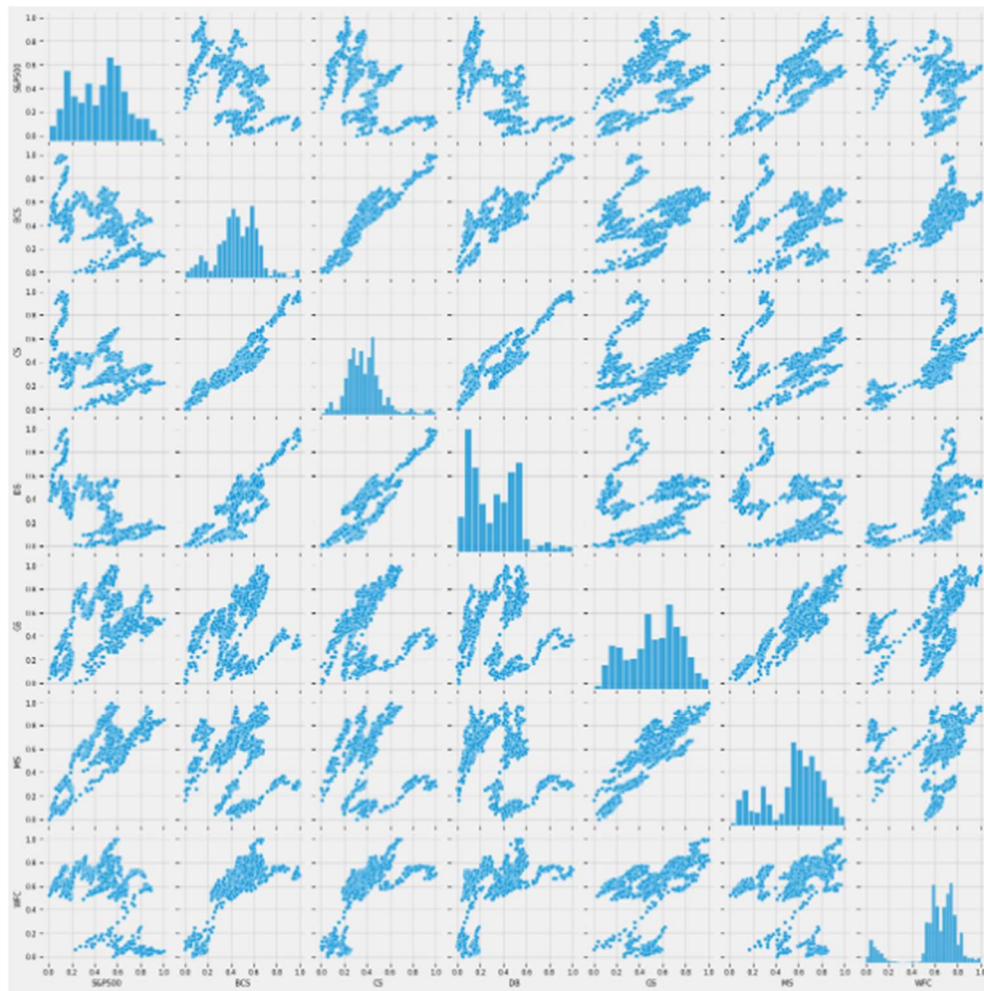
Abbreviation	Industry	Company Name
AAL	Aviation	American Airlines Group Inc
ALGT	Aviation	Allegiant Travel Company
ALK	Aviation	Alaska Air Group Inc
DAL	Aviation	Delta Air Lines Inc
HA	Aviation	Hawaiian Holdings Inc
LUV	Aviation	Southwest Airlines Co
BCS	Finance	Barclays
CS	Finance	Credit Suisse
DB	Finance	Deutsche Bank
GS	Finance	Goldman Sachs
MS	Finance	Morgan Stanley
WFC	Finance	Wells Fargo
JNJ	Healthcare	Johnson & Johnson
MRK	Healthcare	Merck and CO inc.
PFE	Healthcare	Pfizer inc
UNH	Healthcare	UnitedHealthGroup Inc
BHC	Pharmaceuticals	Bausch Health Companies inc
RHHBY	Pharmaceuticals	Roche Holding AG
AAPL	Technology	Apple Inc
AMZN	Technology	Amazon
FB	Technology	Facebook
GOOG	Technology	Alphabet
IBM	Technology	IBM
MSFT	Technology	Microsoft

Aviation Sector Analysis



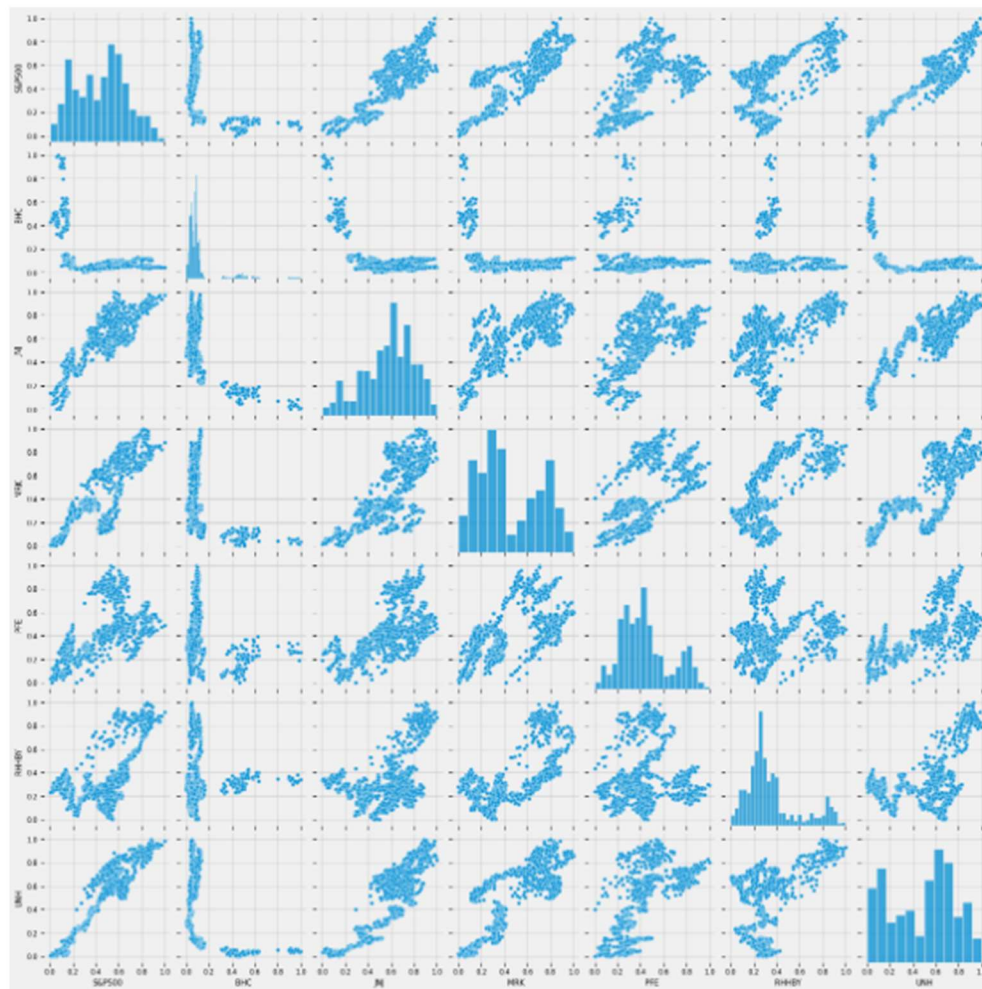
The pearson coeffecinet = 0.47. If p value is closer to 1, it means that there is higher positive correlation. If p value is closer to -1, it means that there is negative correlation. According to the above graph it can be concluded that HA and ALGT stock prices have less positive correlation.

Financial Sector Analysis

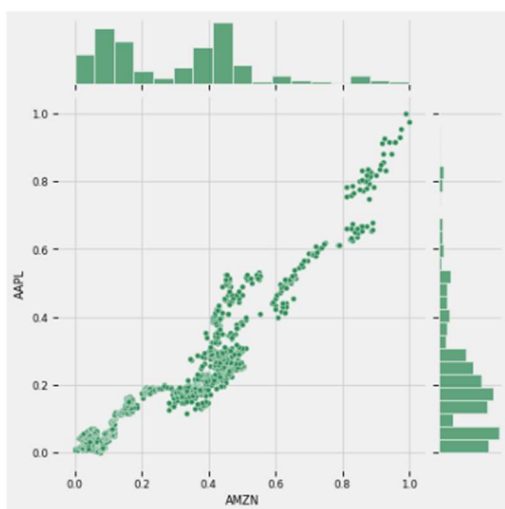


According to the above it can be highlighted that Morgan Stanley and Goldman Sachs are highly correlated.

Pharmaceutical Sector Analysis

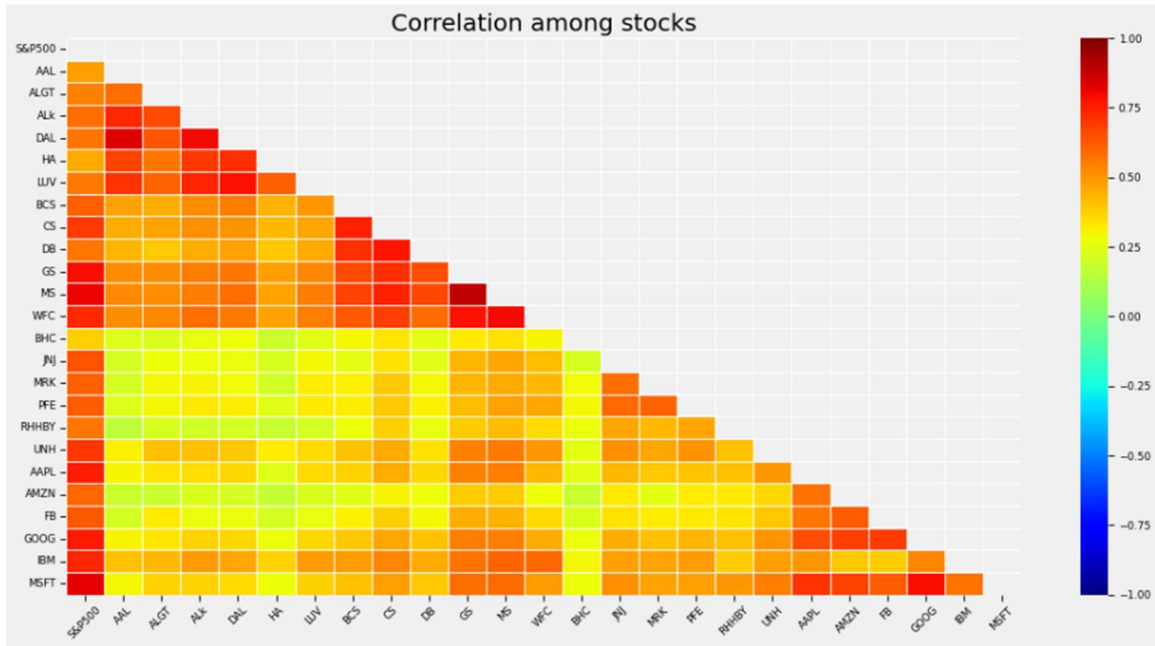


Technological Sector Analysis



INSIGHT: According to graph above the pearson coefficient = 0.94. If p value is closer to 1, it means that there is higher positive correlation. If p value is closer to -1, it means that there is negative correlation. According to the above graph it can be concluded that Apple and Amazon stock prices have high positive correlation.

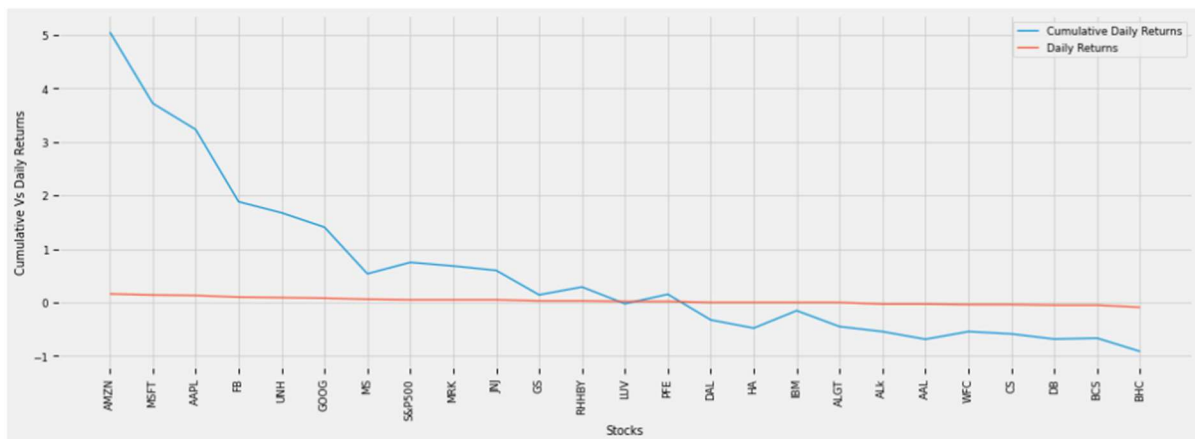
Heatmap - Correlation for the daily returns



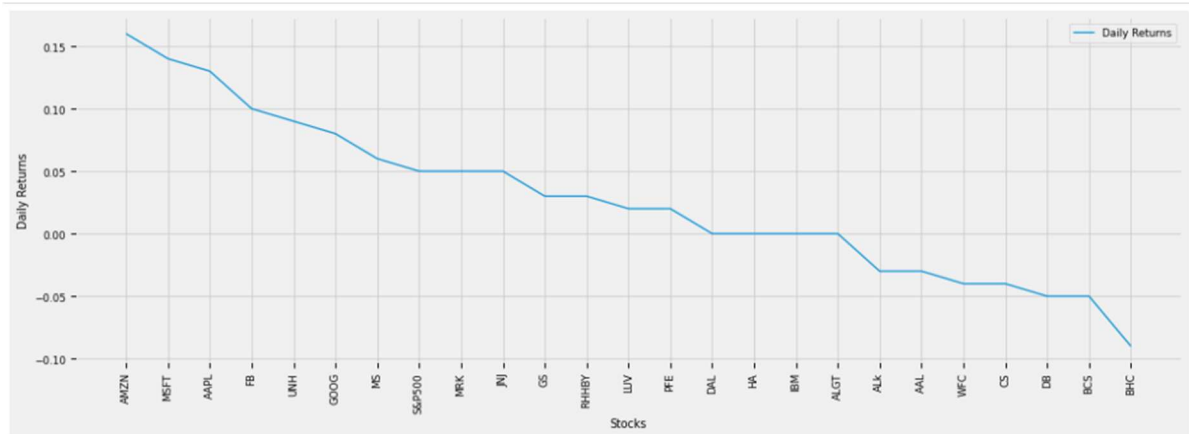
From the above Graph we can see that

Microsoft & Google stocks are highly correlated in the Technology Stocks Goldman Sachs, Morgan Stanley & WellsFargo are correlated in the Finance Stocks American Airlines & Delta Airlines are more correlated than Alaska Air Group in the Aviation stocks Pharma stocks are less correlated when compared to any other sector stocks

Line Graph – Cumulative vs Daily Return

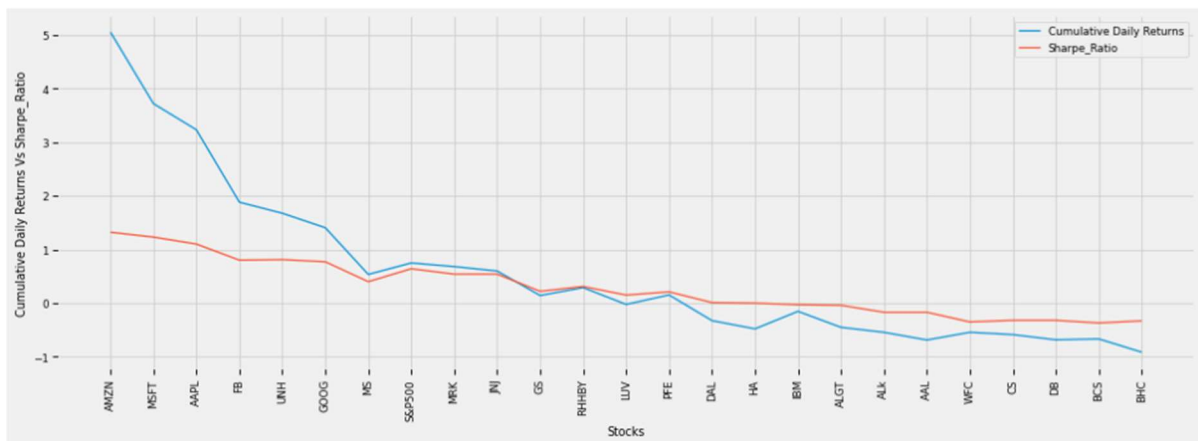


Line Graph – Daily Returns

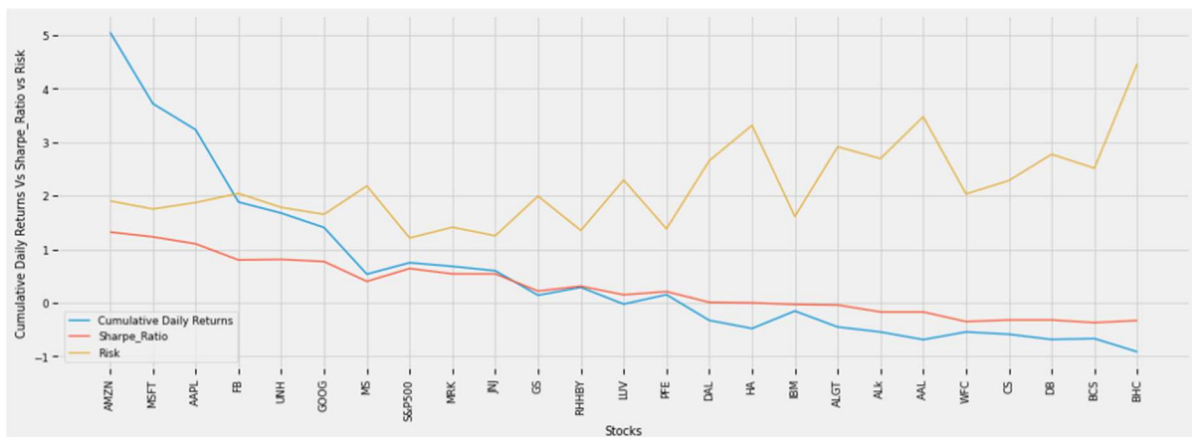


According to the above graph it can be seen that Apple, Amazon, Facebook, Google, Microsoft and United health have given a better daily return.

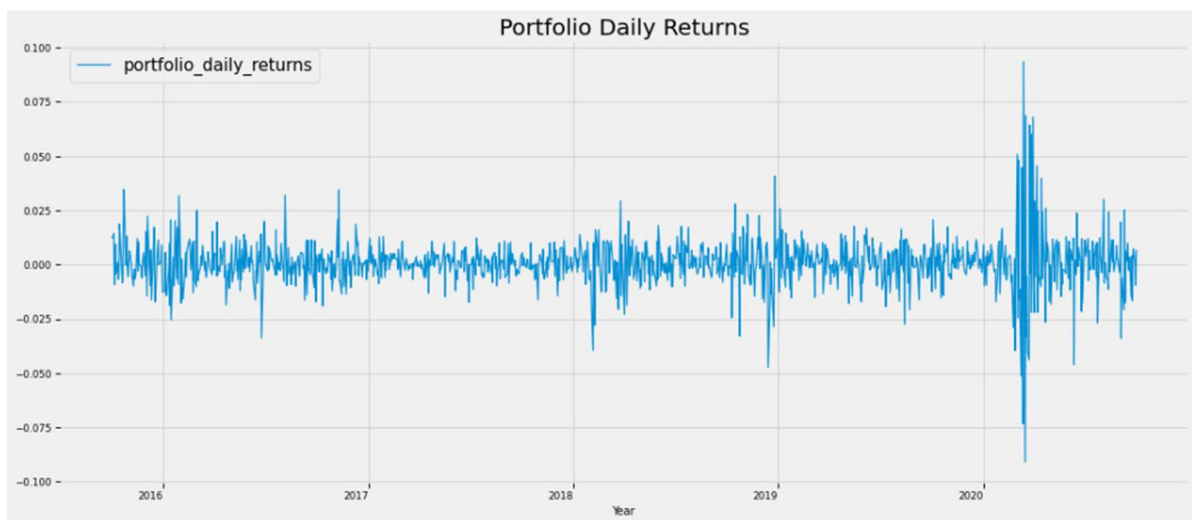
Line Graph – Cumulative Daily Returns vs Sharpe Ratio



Line Graph – Cumulative daily returns vs Sharpie ratio vs risk



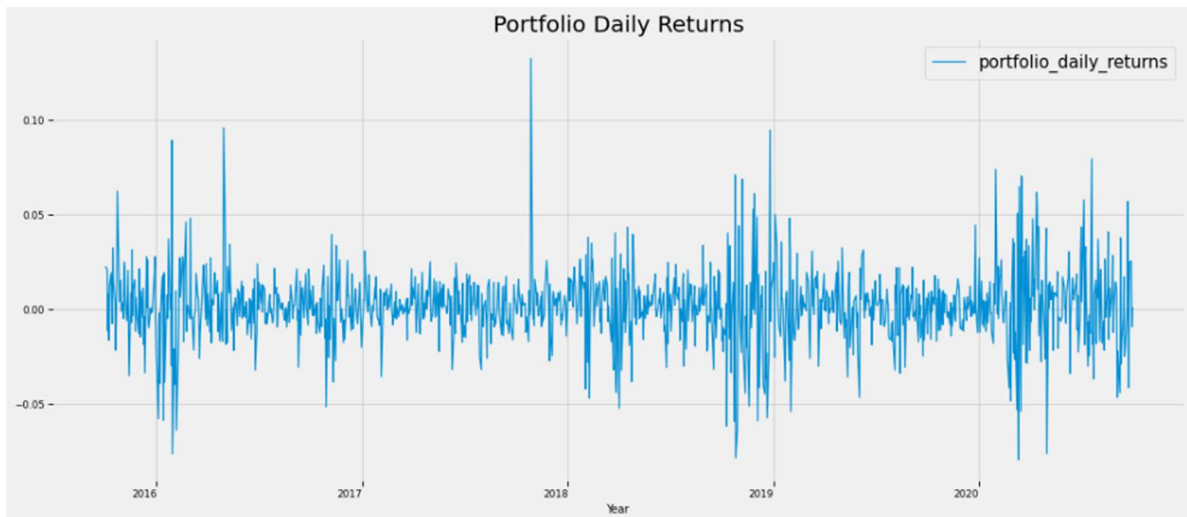
Line Graph - Portfolio Daily Returns



Daily Returns



Total Portfolio Return



As seen in the plot, the portfolio shows larger variation in prices from end of 2017 to 2020.

Cumulative return from portfolio analysis

