

PORTFOLIO ANALYSIS

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Goal of the project

The objective of this project is to analyze asset price data, calculate the returns of a portfolio, and perform an analysis to understand its overall performance and risks.

CONTINUE



DATASET OVERVIEW:

The project is based on three datasets:

asset_information_data.csv

Provides detailed information about each asset, including its name and asset class (e.g., Fixed Income, Equity).

asset_price_data.csv

Records the historical price data for each asset over time, facilitating the analysis of price movements.

portfolio_weights.csv

Contains the portfolio's asset allocation, specifying the weights assigned to each asset on specific dates.



PROJECT METHODOLOGY

ETL, Data Cleaning & Data Exploration

- Initial examination of the dataset for missing values and duplicate rows.
- Descriptive statistics and visual analysis to understand the data distributions.
- The 'date' column was formatted as datetime, and correlation matrices were computed using both Pearson and Spearman methods.

CONTINUE



PROJECT METHODOLOGY

Calculating Returns: Trend Analysis

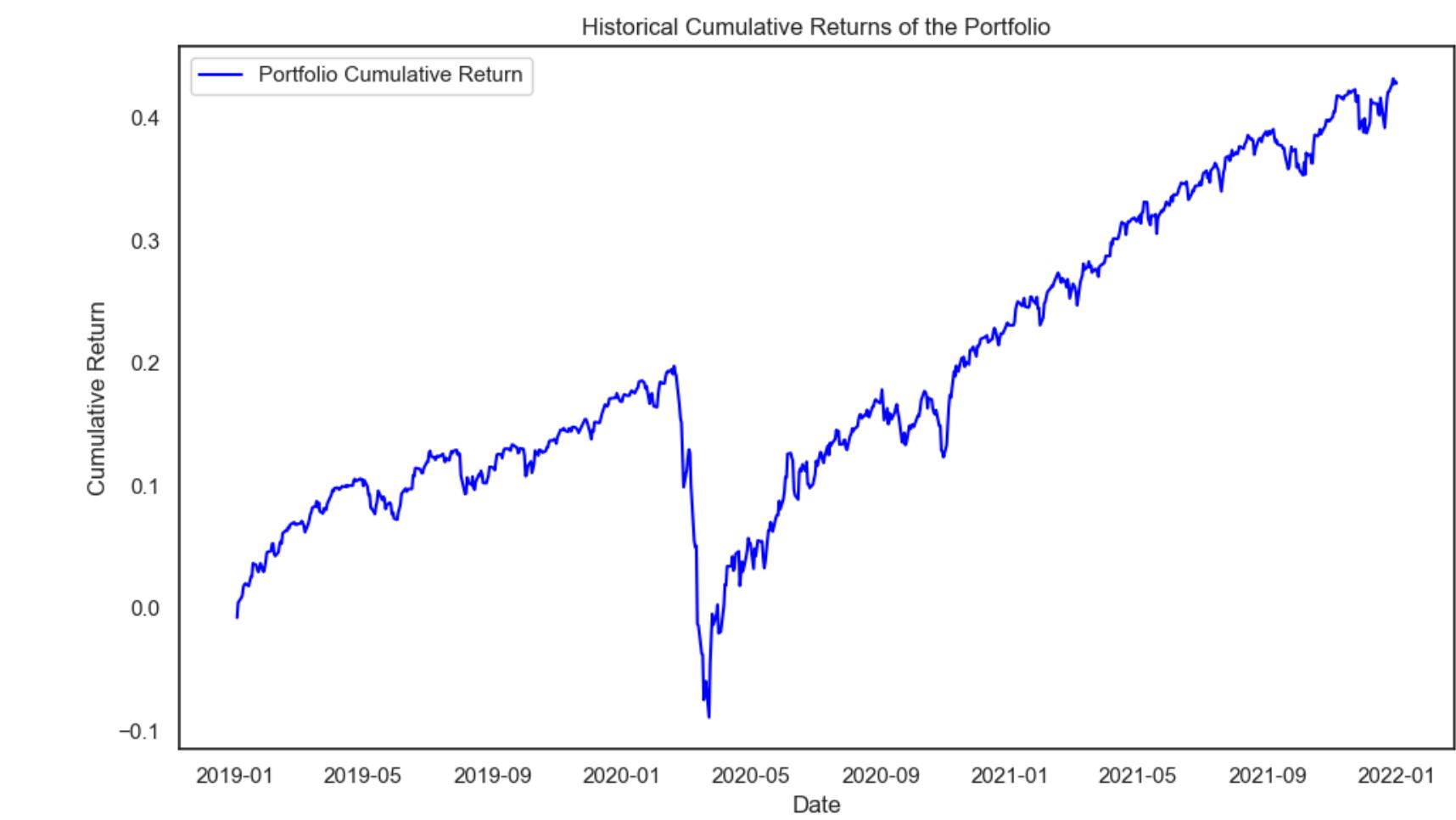
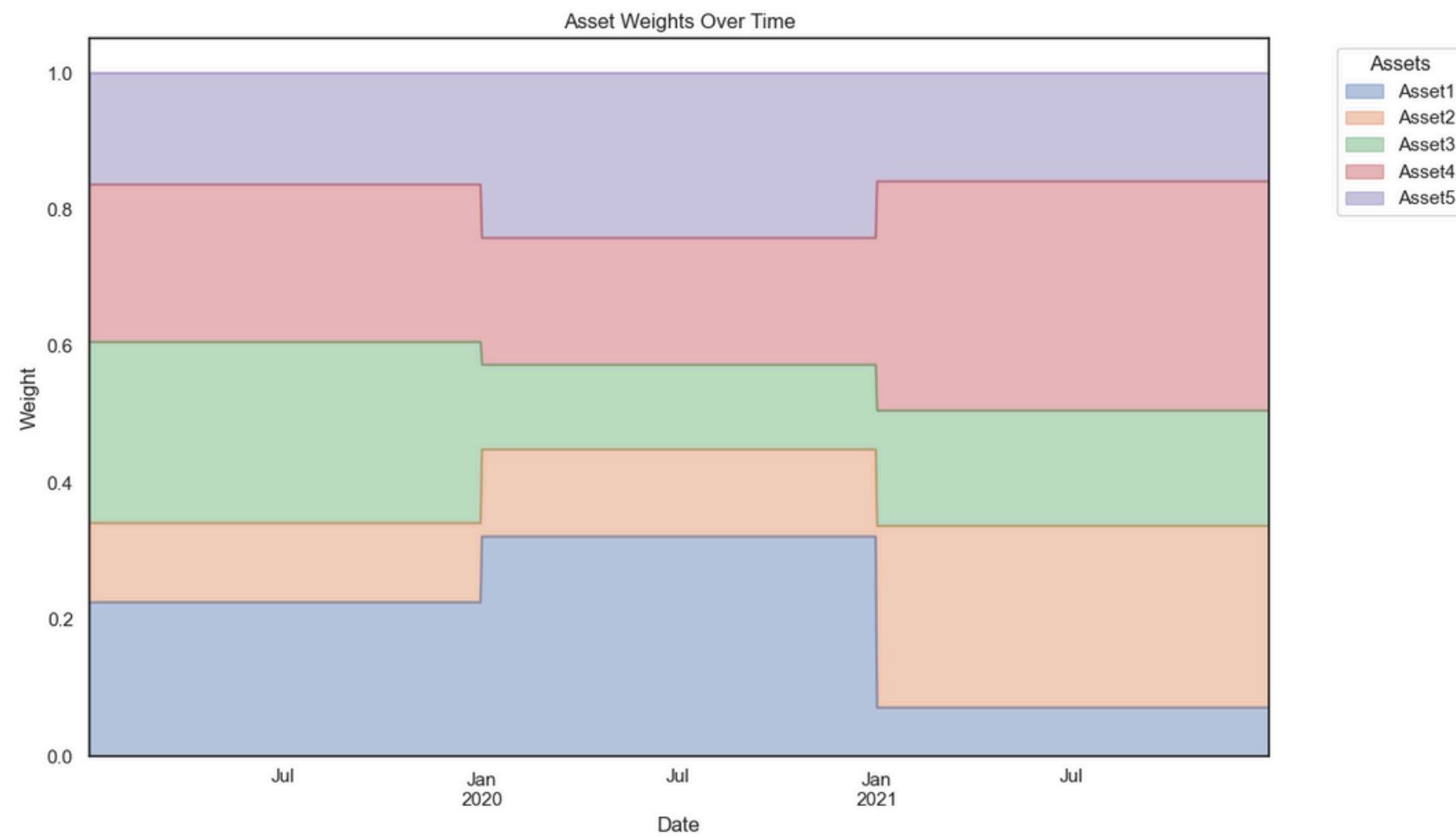
- Daily Returns: calculated daily price changes to track how each asset performed day by day.
- Cumulative Returns: By multiplying daily returns over time, we measured the total growth of each asset.
- Average Returns & Volatility: calculated average daily returns and volatility to understand both the performance and stability of the assets.

CONTINUE



PROJECT METHODOLOGY

Data Visualizations



CONTINUE



THANK
YOU!