

The visualizations were created by executing SQL queries in Jupyter Notebook to analyze both Tiingo API and Wikipedia web scrape data, then exporting these query results to Excel for visualization. For the API analysis, two bar charts were created: one showing year-over-year volatility percentage changes across sectors (descriptive), and another displaying the top 10 most volatile Real Estate equities in 2020 (diagnostic). For the Wikipedia data analysis, a bar chart was generated to illustrate S&P 500 sector composition by company count (descriptive), while a scatter plot was created to examine the relationship between sub-industry size and tenure within the Industrials sector (diagnostic). All visualizations were constructed using Excel's built-in charting functionality, allowing for clear presentation of the analytical findings from both data sources.