Time-series Stock Price Predictive Analytics

# Members

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# Abstract

The stock market began in 1792 on Wall Street New York with a few stockbrokers on the street (Posner, 2020). Now it has evolved and grown dramatically all around the world and has taken advantage of the digital era. The stock market is a platform that allows investors to buy and sell most commonly stock which is shares of a public company. Other investments include bonds and commodities such as gold and oil. The stock market is a complex and dirty game filled with millions of investors trying to get rich. The S&P 500 is based on the top 500 companies in America and is considered a benchmark for annual stock market returns. Many investors know that the long-term investment into the S&P 500 has an average return on investment of 10%, much better rates than any bank. The number one problem with the stock market is predicting its short-term movements. This is a problem that investors such as Warren Buffett CEO of Berkshire Hathaway have been analyzing and predicting for decades. The dataset used in this research is publicly available from yahoo finance. The number of instances includes decades of each trading day with an average of 250 a year. The data also includes attributes such as ticker symbol, open, close, high, low and volume of the stock traded on each day. With this data we can use predictive analytics and time series to predict the trend of a stock and provide us future information and trends. The tools proposed to solve the problem will be Python, JupyterLab, Excel, and PowerPoint.

Posner, J. (2020). Explained The Stock Market [Video]. Netflix.