Capstone 3: Project Proposal

I would like to build a model to predict the price of stocks.

Problem statement: How can we develop new data-based models to predict the price of stocks, so that the Mean Absolute Percentage Error (or MAPE) is less than 50% over the next 5 years ?

Context: Predicting the prices of stocks is very important for investors. Unfortunately this is very difficult because the stock market is affected by lots of different factors.

Criteria for success: When we apply the model to forecast stock prices over the next 5 years, we find a mean absolute percentage error less than 50%.

Scope of solution space: We will use time series analysis, and will use historical stock data.

Constraints: Our analysis will only use historical stock data, which might not take into account many other socio-economic factors influencing the stock price.

Stakeholders: Investors anywhere in the world.

Data source: The Quandl API or the Yahoo Stock API.