Capstone Project: Algorithmic Trading

The specific task I’d like to accomplish through use of various Data Science techniques is predictive analysis of stock prices based on historical data – in other word, what would the price of a certain stock be given movement of stock from previous days/weeks’ worth of trading?

This will initially be a supervised problem using data collected from Yahoo Finance on various stocks to measure various regressions of stock based on volume, price, volatility, movement, etc. The metrics to study and track would depend on insight from various Algo trading books. If more data is needed outside of what Yahoo Finance can provide, I may have to pay a premium at other sites, which I am willing to do up to a certain amount. Otherwise, I reserve the right to change this project.

This project will require everything I will have learned from the intensive data science course, including machine learning and predictive analysis, while using combination of Python and SQL.

Please note that methods described above can change as I learn more throughout the course, but at first glance of syllabus, this is what I can come up with.

-Haas Chaudhry