Anthony Kafui Kwawu

Professor: Dr. Charles Jackson

Stock Market Predictions with Machine Learning and Forecasting

I set out to use familiar clustering algorithms to predict stock market values and hoped to get a model that would help me in my trading ambitions. Acquiring the data was difficult and risky (Securities exchange commission for instance). Moreover, cleaning the data was very painstaking too. I had to transpose and delete unnecessary columns and spaces. After using the basic prediction models available in R, I was a bit disappointed because the forecast results did not reflect, accurately, the prevailing stock market prices. I did not despair because of the forecast results so I set out to use machine learning techniques to do some character recognition which would serve as a basis for a future project to build a more advanced model for predictions.

My work was aided by numerous python Libraries such as scilearn, scipy and numpy. These models were relevant for my statistical work. These models were relevant for my statistical work. The pandas library and mathplot lib libraries were useful for graphing and visualizing my data. My character recognition algorithm was flawless and I’m confident I can build a more complex model for real world application.

It was a truly enlightening class that led to a challenging and interesting final project.