Day Trading: A Guide to Making Enough Money You Can Drop Out of School

As a second year student at UVA you're getting tired of your classes and homework. Your classes are a breeze and you're getting bored. Maybe college isn't worth your time and money.

You decide you want to get rich quick and try your hand at the stock market. You've seen posts from others about investing strategies, but you don't trust the decisions of other people. Instead you decide you want to use your data science knowledge to build a model to predict the future price of a stock

After doing some research online you find information about predicting future stock prices using an autoregressive integrated moving average (ARIMA) model. You find stock information from the NASDAQ to get data on some promising stocks from the past 10 years.

Your task:

- Process the data. Look for stationarity, seasonality, and cross-correlation
- Build a model to predict the prices of the stocks you are exploring
- Evaluate the accuracy of the predictions and how they can be used in making stock trades

Deliverables:

- Generated graphs displaying the stationarity, seasonality, and cross-correlation of the data and a corresponding document discussing each of the graphs.
- Graph predicting the future prices of your stocks over the course of the last year of data.
- Two page document discussing the accuracy of the predictions and if/how you would use your model to make trading decisions in the future.