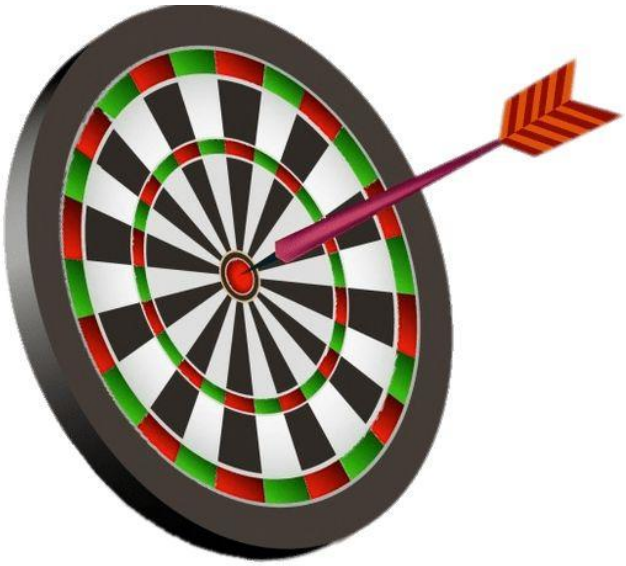
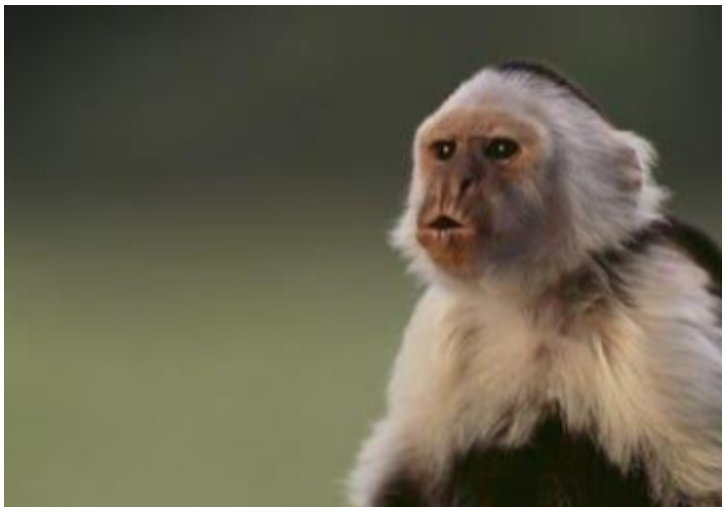
Think You Know Stocks Better than a Monkey with Darts?





The last bit of money in your bank account has dried up from tuition, groceries, and the weekends on the corner. A normal college student might get a part time job, but as a young fledgling data scientist, you've got a better idea. Why not start day trading? But you're not like a normal day trader, you've got the power of machine learning and data science behind you. Now it's time for you to figure out how you can turn your pennies into millions.

The stock market is one of the most unpredictable things that any data science researcher or student will encounter in their lifetime. This hasn't stopped many companies, researchers, and ambitious undergrads from trying their hand at trying to beat the market by putting their data science and machine learning skills to the test. Despite the challenge there are many different approaches to try and predict stocks prices short term and long term changes. From time series models, to deep learning, to reinforcement learning, and econometric models, there are tons of different ways people have tried and succeeded at modeling parts of the stock market.

Your Task:

1. Find a type of model that you would like to try and build, experiment with anything you'd like (technical articles about using time series models will be provided)
2. Clean the provided data to fit your chosen model, you will be given 6 different stocks and price information about them from 2013 to 2023
3. Predict the change in stock price over a period of time over the past year, and compare it to the actual change in stock prices, this can be in day to day or month to month change

Your Deliverables:

1. Multipage PDF detailing your findings and the process you used to get them, including; hypothesis, data cleaning, analysis, conclusions, and next steps
2. Online repository including figures and all used code