* Brad Eland
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* Title of the project: **Predicting the price of a stock using neural networks**
* High level description of the project: what question or problem are you addressing? I’m hoping to look into if using other factors affect the price of a stock. For instance, does the price of precious metals or silicone production stocks affect the price of a stock like Apple. I’m going to also see if I can bring in the MACD (a typical indicator traders can find in any trading platform) to more highly predict the price of a stock. I haven’t chosen the exact stock I want to use, but something where I know there will be other stocks I can find a trend against like in the gold/silicone example above.
* What type of data science task is it? (some example answers but not limited to)
  + prediction using time series analysis as well as I’m thinking some kind of neural network to try and predict the price more accurately.
* Data: Brief description of data. How big do you expect the data will be?
  + Is amount of your data too big or too small? I believe I can go back as far as I want (I have tested the data back to 1/1/2000 using yahoo finance) regarding the data
  + If you're web-scraping or collecting data, how long do you expect to collect the data? I am connecting to yahoo finance (currently through google colab) and I can collect it as long as I need to if the algorithm is working successfully for me.
* How will you analyze the data?
  + What machine learning methods do you plan to use, and/or what business intelligence aspect do you plan on incorporating? I am thinking of using supervised learning (meaning I will label the training data). I was thinking of trying to give more precident to more recent data (weighting it differently than things from 2000, while trying to have the system recognize patterns).
* Describe any anticipated difficulties and problems. My biggest concern is that I have never attempted this with using multiple datasets (stocks/futures/indicators) to try and predict one outcome.
  + Discuss how you may overcome the problems. I will have to find new ways of doing things and try to learn all the neural networks stuff again as I haven’t done that since I believe 2020 (last class I took before last fall).
* Suggest a timeline for the project.  This should be a weekly breakdown of what you plan on doing each week.
  + Week 2 – Get data flowing for all of the stocks/futures/indicators
  + Week 3 – Merging the data into “one data set”
  + Week 4 – Create a neural network for one of the datasets (my main stock I’m trying to predict?)
  + Week 5 - Create a neural network for the merged dataset
  + Week 6 – Optimize the merged dataset neural network
* Github Repository: [GitHub Link](https://github.com/bradeland/Regis-MSDS-Practicum-I)