

*Machine Learning Bootcamp - 2020*

**Team No. 1**

**Project 2**

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**Abstract Submission**

The stock market is a virtual environment where investors can buy and sell company shares publicly. The most important aspect of this is the share’s price. Depending on the state of the market, the price fluctuates as internal and external stimulus effect the supply and demand in seemingly unpredictable ways. As impossible as it might seem, investors continue to spend countless time and resources attempting to predict future stock changes.

To attempt to predict the stock price, we will use a data set of a single company called Royal Dutch Shell. For the data set, since daily stock prices change countless times throughout the day, we will only use the most representative data points: open price, close price highest price, lowest price, and the volume. These most representative data are mostly open source online which can be accessed by the following methods: 1) Through Kaggle datasets search engine 2) Using data readers in pandas package in Python to fetch the data from websites 3) Through other websites

For this project, we will use the artificial neural network technique to build the stock price prediction model. Based on a long history, the model is expected to connect inputs with hidden layers using weight functions and bias, compare the predicted values with actual values to find out errors, then use those errors to train itself until it predicts accurate results. To predict the stock price for 2020, the range of the data set must be chosen carefully for accurate results.