Close Value of Stock Prediction

Problem Statement
Neural network is machine learning technique that try to mimic the working of neuron in human brain for learning. At first it is unstable and after certain iteration of data it adjust itself such that it's accuracy increases. Although neural networks are widely known for use in deep learning and modeling complex problems such as image recognition, they are easily adapted to regression problems. Neural network regression is suited to problems where a more traditional regression model cannot fit a solution.
Build a Regression model using neural network on financial data from Yahoo Finance - Dow Jones Industrial Average data to predict close value of stock.

Data Description
This data frame contains the following columns attained for a particular period of time.
- Date: Trading date.
- Open: Opening price of the stock recorded during the day's trading.
- High: Highest price of the stock.
- Low: Lowest price of the stock.
- Close: A closing price is the final price at which a stock is traded on a given trading day.
- Adj Close: adjusted closing price of the stock.
- Volume: Number of shares traded in a given time period

Evaluation Parameters
Evaluation will be based on:
- Data Preprocessing
- Model Comparison
- Model Selection

Data Preprocessing
Normalize or Standardize the data.

Model Comparison
Change the hyperparameters of the Neural network with regression and compare results.

Model Selection
Select the best model. Model selection to be based on model RMSE.

Expected Outcome
Low RMSE is expected while predicting the outcome using test data and and high coefficient of determination, R^2.