**STOCK PREDICTION PROJECT – MODELS AND FEATURE IMPORTANCES ON PREDICTION**

For each stock, seven models were trained on two folds to increase model performance, and error was measured using the mean absolute error.

The results and feature importance plots can be found in the output folders with file name – results.xlsx, and \*.png files, respectively. V1\_train\_inference.csv and V1\_test\_inference.csv are the predictions on the train/test set.

I have presented below, the summary of everything. of each model on the data. Feature Importance Image can be found for each stock.

**AAPL**

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| **MODELS** | **MEAN ABSOLUTE ERROR** |
| Decision Tree | 1.686408 |
| Random Forest | 1.261689 |
| Linear Regression | 1.153799 |
| XGBoost | 1.388031 |
| SVM | 3.701918 |
| LightGBM | 1.341521 |
| LSTM | 1.928174 |

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| **MODELS** | **MEAN ABSOLUTE ERROR** |
| Decision Tree | 2.278144 |
| Random Forest | 1.791734 |
| Linear Regression | 1.658702 |
| XGBoost | 1.814385 |
| SVM | 5.696608 |
| LightGBM | 1.897146 |
| LSTM | 2.477206 |

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**EURUSD**

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| **MODELS** | **MEAN ABSOLUTE ERROR** |
| Decision Tree | 0.00788 |
| Random Forest | 0.005808 |
| Linear Regression | 0.005388 |
| XGBoost | 0.005821 |
| SVM | 0.044691 |
| LightGBM | 0.00635 |
| LSTM | 0.01079 |

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