FORECASTING STOCK PRICES USING IMAGE CLASSIFICATION

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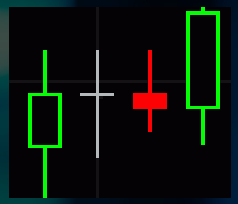
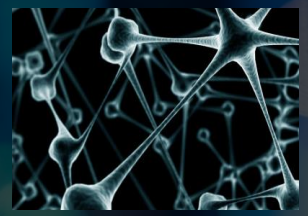
Flatiron School Module 4 Project

METHODOLOGY



Generate Stock Charts

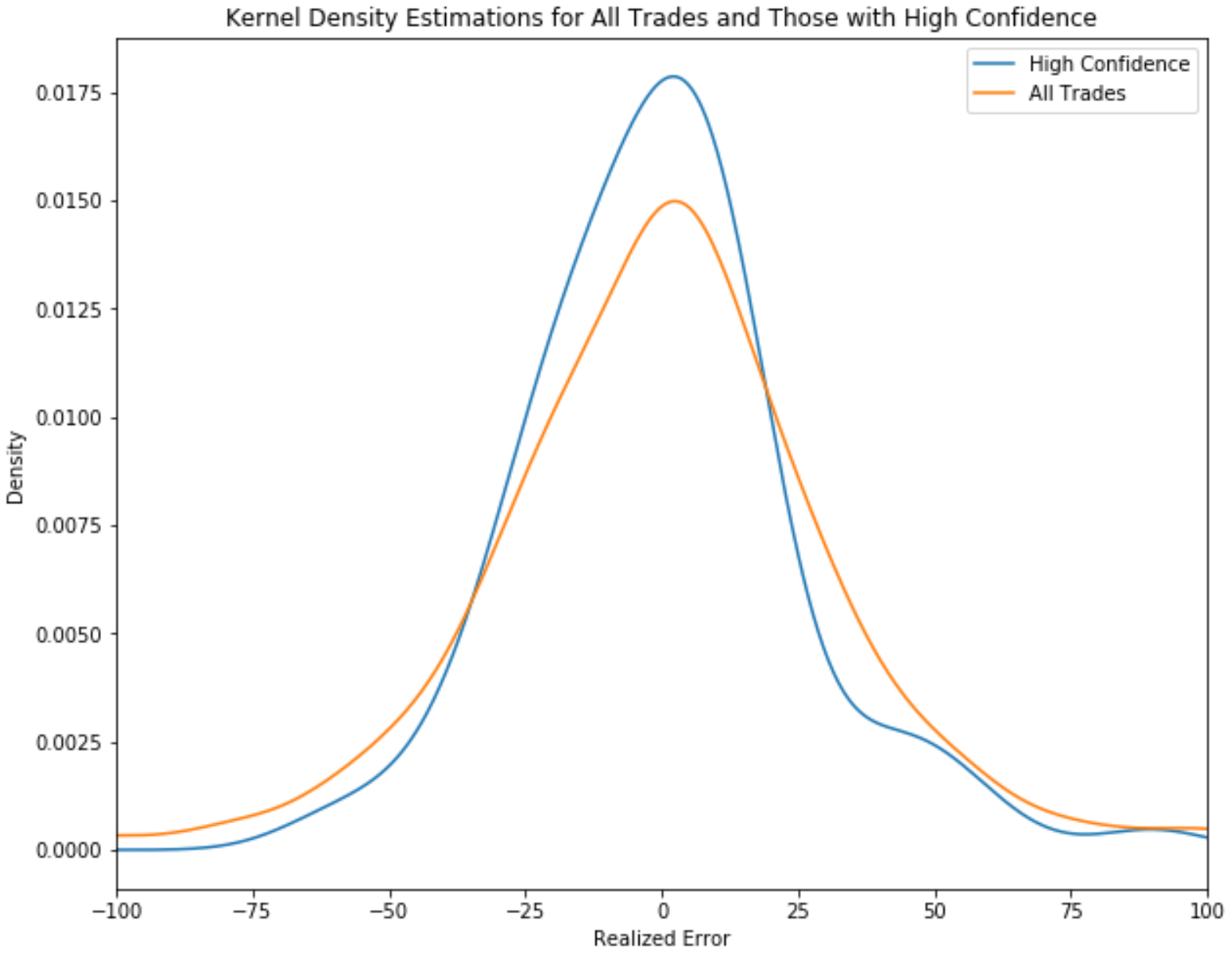


Train Neural Network

Make Predictions

MULTI-CATEGORICAL CLASSIFICATION

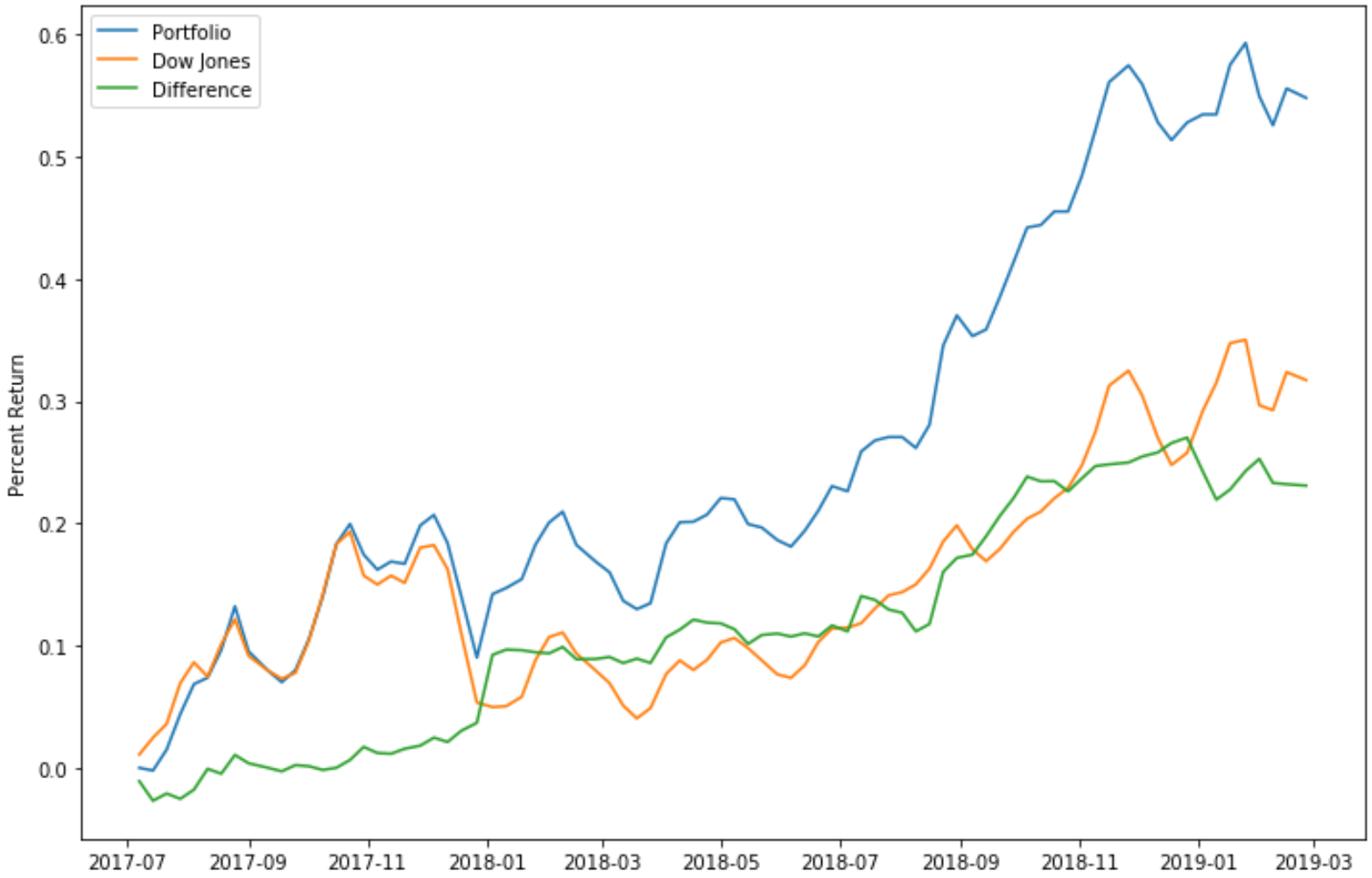
Model reduced standard deviation of the error score from 28.5 to 24.6



BINARY CLASSIFICATION

Model produced a return of 55% compared to 31% from the Dow Jones

Improved results in both bull and bear markets



CONCLUSIONS

- The multi-categorical classification provided a reduction in error which can be very valuable to options traders
- Binary classification gave better trades than the Dow Jones in both bull and bear markets

FURTHER EXPLORATION

- Tuning the architecture of the neural network
- Changing the number of days included in each chart
- Increasing the number of pixels in each chart image
- Adding extra indicators to the charts
- Including more stocks and stocks that have gone bankrupt to eliminate survivorship bias