Numerical Methods / Scientific Computing

Project 4: Stock prediction using neural networks

Write a computer code that uses neural networks in order to predict stock prices (or any asset prices, such as cryptocurrencies). This project is open ended – you can use any neural network method and any stock/asset data. The following steps should be followed:

1. Data preparation and analysis
2. Model description
3. Training
4. Prediction

Some references are below to give you some ideas, however you should come up with your own data set, model, and computer code.

[Stock prediction using recurrent neural networks | by Joshua Wyatt Smith | Towards Data Science](https://towardsdatascience.com/stock-prediction-using-recurrent-neural-networks-c03637437578)

[Predict Stock Prices Using RNN: Part 1 (lilianweng.github.io)](https://lilianweng.github.io/lil-log/2017/07/08/predict-stock-prices-using-RNN-part-1.html)

[NY Stock Price Prediction RNN LSTM GRU | Kaggle](https://www.kaggle.com/raoulma/ny-stock-price-prediction-rnn-lstm-gru)

[Time Series prediction using Recurrent Neural Networks | by Marianne Benkamoun | Medium](https://medium.com/@marianne.benkamoun/stock-price-prediction-using-recurrent-neural-networks-369c21817da8)