Computer Architecture and Organization Review: - 2

Mohd Hammad Khan 18BCE0871

Platform Utilised:-

Google Colab Notebook

Hardware specification:-

Intel Xeon processor (2.3Ghz) with 12.6 Gb ram and having Tesla K80 Gpu and 8 TPU

Languages Libraries Used:-

Python3 and Tenserflow 2 and Keras 2.1.6 deep learning library

Dataset :-

Dataset was acquired using quandl api and the data was collected in real time.

Algorithm used:- (LSTM)

One of the best models for time series forecasting is Long Short Term Memory network (LSTM). It is a type of recurring neural network which is capable of learning long-term dependencies. LSTM structure consist of chain format which includes neural network and cells (which are the memory blocks). In LSTM model cells do the storage works and gates manipulate the memory. In LSTM model there are mainly 3 type of gates input, output and forget gate. The forget gate is used to remove the information which is no longer useful to store. The new useful information is added in the cell using the input gate. The output gate is used to release the useful information stored in the cell as output.