**International Stock Index Prediction Using Artificial Neural Network (ANN) and Python Programming**

The stock market is one of the best channels for financial development that requires a high accuracy prediction of the trades. This subject needs some technical skills and experience to achieve the best result. This paper represents a tuned Python console program based on the Neural Network (NN), and the Artificial Intelligence (AI) to predict future price in a qualified and quantized way with high accuracy and close to real. New ideas implemented in this paper are combining AI and NN model in the Python console system with a security shell that works with voice and PIN to authenticate the user. It has Cross-Platform capability and supports cryptocurrencies price and their predictions. This program enables the user to have a duplication of the final data in his/her given email. The proposed approach presents the influence of AI and Machine learning in nearly future predictions. This system can be used in the all kinds of subjects that include past time databases.

**EXISTING SYSTEM:**

In stock trading, it is very decorous that a model like NN provides a prediction nearly to the real price. Predicting the stock market is one of the processes that requires experience and reacquaint to have an accurate prediction. However, this process is qualitative and cannot be a complete prediction.

**DISADVANTAGES OF EXISTING SYSTEM:**

* Mean Squared Error (RMSE) values for future that is more reliable than qualitative predictions
* outputs is not useful to predict future data.

**Algorithm**: Random Forest, KNN Model, Support Vector Machines (SVM).

**PROPOSED SYSTEM:**

This program proposes an attention-based short-term and memory model to predict the International Stock Price trend and all system runs on Python. The model consists of five layers: Shell Layer, Input Layer, Hidden Layer, Attention Layer and Output Layer. The shell layer authenticates the user. The input layer reads the input data that meet the input requirements. The hidden layer is correlated to the linear network thorough the LSTM unit. The attention layer prepares future amounts based on the predictions that are performed in the hidden layer. The output layer receives the final measured results to show for the user. The proposed framework is illustrated in Fig. 1 and the diagram of the LSTM method is shown.

**]ADVANTAGES OF PROPOSED SYSTEM:**

* to make complicated approaches for accurate prediction close to the real value.
* the results validate the possibility and correctness of the program and the prediction. The experiment compared with the prediction that indicated with classic ways, validates the correctness of the proposed Python program.
* **Algorithm**: Artificial Intelligence, Artificial Neural Network (ANN), International Stock Prediction, LSTM, Python Programming.

**SYSTEM REQUIREMENTS:**

**HARDWARE REQUIREMENTS:**

* System : Intel Core i5.
* Hard Disk : 500GB.
* Monitor : 15’’ LED
* Input Devices : Keyboard, Mouse
* Ram : 32GB.

**SOFTWARE REQUIREMENTS:**

* Operating system : Windows 10.
* Coding Language : Python
* Tool : PyCharm, Visual Studio Code
* Database : SQLite

**REFERENCE:**

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