AR-LSTM – Adaptative Refined Deep Learning System for Short-term Trend Forecast: A Financial Perspective.

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I. INTRODUCTION

This project surveys current machine learning techniques for Short Time Stock Price Prediction and introduced the concept of an adaptative-refined system (AR-LSTM) for this purpose.

II. CONCEPTS

Long short-term memory (LSTM) units or blocks are part of a recurrent neural network structure. RNN are made to utilize certain types of artificial memory processes that can help these artificial intelligence programs to more effectively imitate human thought. The recurrent neural network uses long short-term memory blocks to provide context for the way the program receives inputs and creates outputs. The long short-term memory block is a complex unit with various components such as weighted inputs, activation functions, inputs from previous blocks and eventual outputs.

III. NOTES

- Please go to the source code in the repository for technical evaluation.
- The performance evaluation of the code was performed on a single stock of Air Canada "AC" on (TSX), Canadian market.
- This is a project with a wide scope for improvement, you can check it in the future for more updates.

IV. CODE LANGUAGE

Python