

## INFORMATICS INSTITUTE OF TECHNOLOGY In Collaboration with UNIVERSITY OF WESTMINSTER

## Analysing Price Volatility for Price Forecasting of Food Commodities in Sri Lanka

A dissertation by

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## Abstract

There are several types of food commodities available in the Sri Lankan market and the customers usually visit physically or use online services to purchase those items for the fulfilment of their food consumption. The price of those food commodities is one of the main concerns and the sudden price gains and reductions are concerned by several parties who are involved in the buying and selling process. The final outcome of this research project is a solution for the problem of price volatility of food commodities in Sri Lankan market due to the unavailability of a system to deliver price forecast to get an idea about them. LSTM deep learning model approach is identified by analyzing the previous research work, currently implemented solutions and techniques that will result on building up a price forecasting system which comprises with a generalized model. It will deliver the price forecast for the beneficiaries in a user friendly way by maintaining 70% of test accuracy. By viewing those forecasts, the users will be able to have an idea on how the price will be evolved for those commodities in future.

Key Words: Machine Learning, Deep Learning, Time Series Analysis, Food Commodities