

**PRICE FORECASTING SYSTEM USING TIME SERIES
FOR SRI LANKAN RUBBER MARKET**

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A dissertation in partial fulfillment of the requirement for Bachelor of Science
(Honors) degree in Computer Science

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In collaboration with
University of Westminster, UK**

2021

Abstract

Data Science techniques has been growing slowly but systematically during 2000s and first part of 2010s. The rise of “Big Data” and a new set of methods, conventions and skills that came to be called “Data Science”. It includes classical statistical methods from 19th century and early 20th century. However, with the help of computers, additional concepts and techniques were developed in 1960s which help humanity in many ways nowadays.

Forecasting is also a main topic under data science and has used widely to improve various things. There are many methods and techniques which has been developed from the past and still researchers finding and developing many methods. Also, it should be mentioned that time series methods have been very famous, useful and widely used since the past.

Visualizing data or processed data makes easier to find problems and solutions. And also, it helps everyone to understand or make someone understand in a better way. Data visualization is a trending topic in business industry and a great way to present computational statistics. Data visualizations also do a great job in finding errors and optimizing data science methods.

In this research project, author is using SARIMA which is a widely used time series method of forecasting to help Sri Lankan rubber factory owners to find the right time to buy field latex and sell their products according to increases or decreases of Sri Lankan rubber market by forecasting important prices.

This will be very useful to factory owners and managers when working remotely and specially in pandemic time periods such as COVID-19.

Keywords: Time Series Forecasting, SARIMA, Sri Lankan Rubber Industry, Latex Prices Forecasting, Data Visualization