

North South University



Senior Project

Final Report

Submitted by

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**In consideration of fulfillment of the requirements of the degree of  
Bachelor of Science**

**In**

**Computer and Science Engineering**

Department of Electrical and Computer Engineering

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## AGREEMENT FORM

We hereby solemnly declare that this report is on “Market Analyzer: The Stock Prediction algorithm and software solely designed on the basis of sales data provided by Rokomari.com: An emerging startup” has only been prepared as a fulfillment of the Bachelor of Science in Computer and Science Engineering (BS in CSE) program under the ECE department, North South University, Dhaka, Bangladesh. We also affirm that this report has not been submitted elsewhere for any other purpose.

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## **ACKNOWLEDGEMENT**

By consideration of the Almighty, we have effectively finished up our project showcase and are hereby presenting our report on the successful completion of our senior project. Our profound appreciation goes to our supervisor Dr. Mahdy Rahman Chowdhury, Assistant Professor of North South University first, for his significant direction, attitude and astute guidance identified through our entire senior project session.

Our genuine much gratitude goes to the Chairman of North South University ECE office, Dr. A. K. A Salam for furnishing us with senior project opportunity.

We see this open door as major breakthrough in our vocation advancement. We will endeavor to utilize abilities and information we have picked up in the most ideal way. We will also keep working on and change with specific end goal to achieve desired vocation destinations.

## **ABSTRACT**

Bangladesh has a lot of potentialities and possibilities as a third world country if it utilizes the blessings of technology properly. With the help of recent technology, different time series analysis models have been developed like ARIMA, ARIMAX, SARIMA, SARIMAX, and even a Facebook developed module called Prophet. Nowadays it is possible to detect the future trend of any business given any type of data. We have applied a similar approach to predict sales for one of the flourishing startups of the country named Rokomari.com. The struggle for any company is to sustain amongst its powerful competitors in its emerging years. It becomes easier to ace over the competitors if the company can have a prior preparation of its upcoming challenges. Our effort was to make the journey smoother so that it can sustain in building a flourishing business amongst its competitors. In order to do so, we have worked with “real world” sparse dataset of the company itself. We were successful in predicting their possible sales for coming years using time series models like SARIMA and Fb Prophet. The paper discusses briefly about the significance and possibilities created due to implementation of our custom build software.