

Analysis to Find an Efficient Stock Market Prediction System

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Abstract. Stock market research Forecasting is fascinating topic. it has an impact on investors' life because they choose which stocks to buy. This entails extensive risk analysis because the choices they make could result in loss. But if some algorithms can be used to make the proper choices, many investors may become millions. This aspect alone encourages many traders and scientists to pursue stock market analysis. But it might be difficult to know when to invest and when not to. This study compares a number of stochastic models, as BLM model, AI net, analysis fundamental net, Jorge frank model, in order to forecast ended share market prices of the Colombo stock Exchange. In this study, the performance of the AFN model in comparison to other models for making predictions was quite amazing. The model has shown to be reliable in forecasting future stock market indices. Through evaluation of several characteristics, including accuracy and precision as computed by MAPE, the robustness of the model has been verified. For complicated time series with both linear and non-linear components, hybrid models can be employed successfully to increase the forecasting model's accuracy

Keywords: *Stock market exchange, BML model, Jorge frank model*