

## **Abstract**

***Predicting the right stock price movements can provide real economic benefits in the future. In the Undergraduate Thesis the method used to make predictions is the CRBM method, this method is known to be optimal in predicting data based on the previous period.***

***Conditional Methods Restricted Boltzmann Machine (CRBM) is a new probabilistic model applied to solve problems, including collaborative filtering, classification, and motion data. CRBM is also a high time series dimension model and has a high degree of parallelization. CRBM is also often used in various matters relating to the determination of the accuracy of forecasting, for example from motion tracking. Therefore, in this Undergraduate Thesis the author is interested to study this topic with CRBM method which has excellent generic capability in motion capture research.***

***To do this research, the first thing to do is an explorative analysis, where it defines some test scenarios from some previous period datasets. Then do a comparative analysis, where the initial test is compared with some other comparability scenarios to see if there are still other results that are better than the original scenario.***

***This study uses historical data derived from Indonesia Stock Exchange and includes part of LQ45. A methode trained in weekly data, to make short term predictions for one week ahead. Base on the results of research that has been done can be seen that the best prediction accuracy obtained in the period 2014-2015, with MAPE 17,449%***