Seminar

Department of Computer Science

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Big Data Analysis for Stock Market Prediction

Thursday, November 16, 2017
1:00 - 1:50 PM
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Abstract

The main objective of this work is to investigate the worthiness of information derived from GDELT (The Global Database of Events, Location/Language, and Tone) project in improving the accuracy of stock market trend prediction specifically for the next days' price changes. GDELT is the largest, most comprehensive, and highest resolution open source database of human society. This research is based on data sets of events generated from GDELT database and daily prices of Bitcoin and some other stock market companies and indices, all from March 2015 to May 2017. Multiple classification algorithms are applied to the generated data sets, first using only features derived from historical market prices and then including more features derived from external sources, in this case, GDELT. Then the performance is evaluated for each model over a range of parameters. The experimental results of this work show that using information gained from GDELT has a direct positive impact on improving the prediction accuracy.