12th Joint Conference on Mathematics and Computer Science, June 14 – 17, 2018, Cluj, Romania1

## **Twitter Analysis**

## Sergiu-George Limboi

Department of Computer Science, Babeş-Bolyai University, Cluj-Napoca

sergiu@cs.ubbcluj.ro

The Twitter platform is one of the most popular social media environments that gathers concise messages regarding the topics of the moment expressed by its users. The valuable information that is extracted from tweets can be applied in many areas or activities and the process of Twitter Analysis can be defined as an activity from the Text Mining domain.

Processing sentiments from tweets is a challenging task due to the natural language complexity, misspelling and short forms of words. Sentiment analysis is a field that identifies emotional information into various polarity classes (positive, negative and neutral). The results and the classification can be used in strategic and managerial decision making activity.

The goal of the survey is to present a variety of approaches, mainly focused on Twitter Sentiment Analysis. Different perspectives are analyzed and compared based on data sets, representations (ngrams, micro-blogging features, TF.IDF model, bag of words model), methods (machine learning approach, lexicon-based approach, hybrid approach) and evaluation measures. Also, the event detection part of Twitter Analysis area is reviewed briefly. All these techniques are described in order to prove the high importance and impact that tweets' analysis has on social studies and society in general.

## References

- Vishal A. Kharde and S. S. Sonawane. Sentiment Analysis of Twitter Data: A Survey of Techniques. International Journal of Computer Applications 139(11):5-15, April 2016. Published by Foundation of Computer Science (FCS), NY, USA.
- [2] Riya Suchdev, Pallavi Kotkar, Rahul Ravindran and Sridhar Swamy. Twitter Sentiment Analysis using Machine Learning and Knowledge-based Approach. International Journal of Computer Applications 103(4):36-40, October 2014.