

## **Cloud-Based Near Real-Time Event Analysis Framework for Twitter**

During the history of Microblogging the question advices to the users changed from "What are You Doing?" to "What's Happening?". Twitter is a good source for searching up-to-date news and what is happening in the world [1].

Nowadays Social Media Analysis (SMA) is very popular among marketers. It provides new techniques for analysis and new strategies for marketing companies. There are four main questions that every marketer would like to know: who is interested in the product, when and where the customers are interested and how better to attract them. However, SMA may provide even more interesting analytics: Social Media listening may help to build early warning system that alarms when a product is at a risk, also evaluation and tracking of customers social network health may show the level of people interest to the company, and many others.

In the thesis you will invent the parameters of Social Media investigation in Twitter and build a cloud-based service for automated Twitter data collection and analysis using topic modeling and sentiment analysis techniques. You will also program a client application for data visualization using JavaScript libraries and provide a final service evaluation with help of external company.

Different Big Data technologies can be used for the thesis: Apache Hadoop, Apache Storm, NoSQL databases. During the thesis you will learn the basics of topic modeling, sentiment analysis, real-time analysis techniques and frameworks.

This work is done in collaboration with e-dynamics GmbH, Web Analytics & Web Intelligence Consulting und Technology.

[1] Shuangyong Song, Qiudan Li, and XiaolongZheng. Detecting popular topics in micro-blogging based on a user interest-based model. pages 1-8, 2012.