PhD Lecture

In partial fulfillment of the terms for obtaining the PhD degree, Martin Leginus will give a lecture on the following subject:

**Tag Clouds and Maps as a Means of Navigation in Social Media Data**

**on Thursday 27\(^{th}\) of August 2015, 11:00, in room 0.2.13 at Selma Lagerlöfs Vej 300**

**Abstract:**

The development of internet technologies has profoundly affected the ways people communicate. Web 2.0 has introduced a paradigm shift from static web pages to a dynamic creation and the sharing of user generated content. Diverse social media systems have emerged, and becoming immensely popular. In today's world, social media is ubiquitous.

To enhance the exploration of social media data, several information access interfaces have been developed. Tag clouds are particularly useful for exploration, browsing and searching social media data. Usually, tag and word clouds depict the most prominent terms from the underlying social media collection. Despite tag clouds benefits, several limitations are present when users employ tag clouds. Due to the specific nature of user-generated content, redundant and irrelevant information negatively affect tag cloud generation.

In this thesis, we introduce a set of new methods which improve diversity and relevance of tag and word clouds. In particular, we observe that clustering analysis of tags as well as grouping of named entities decreases redundancies in the clouds. Further, tag and word clouds generated with graph-based methods attain greater levels of Relevance. Additionally, in an attempt to extend the standard capabilities of tag and word clouds, a novel topic map (denoted as Beomap) is proposed. Beomap is a two-dimensional topic map which provides a clear understanding of topics relatedness with respect to defined queries as well as supporting visualization with user-defined metrics.

Members of the assessment committee are Assoc. Prof. Ira Assent, Aarhus University, Prof. Daniel Lemire, University of Quebec and Assoc. Prof. Manfred Jaeger, Aalborg University. Assoc. Prof. Peter Dolog is Martin Leginus's supervisor. Moderator Assoc. Prof. Simonas Saltenis.

All interested parties are welcome. After the defense the department will be hosting a small reception in cluster 2.