

# WT2.7: BTH - Blekinge Institute of Technology

Leader Piotr Bródka

## Report

Activities performed during the visit

in Wrocław University of Technology Poland

period: from 07.01.2016 - 14.01.2016

author: Piotr Bródka and Fredrik Erlandsson



## Personal Information

Fredrik Erlandsson is a faculty member of Blekinge Institute of Technology. He visited Wrocław University of Technology in the period from 07.01.2016 – 14.01.2016 in order to carry out research and training activities within ENGINE Project Work Package 2 - Enhancing expertise and exchanging know-how through twinning activities with partnering organizations.

## Information about Seminars

Predicting User Participation in Social Media on TUESDAY January 12<sup>th</sup> 2016



## Description of scientific activities

During this visit Piotr Bródka, Henric Johnson and Fredrik Erlandsson have been working on the paper *Finding Influential Users in Social Media Using Rule Learning*. The paper will be submitted to the Entropy journal.

Influential users play an important role in online social networks since users tend to have an impact on each other. Therefore, the proposed work analyses users and their behaviour in order to identify influential users and predict user participation. Normally, the success of a social media site is dependent on the activity level of the participating users. For both online social networking sites and individual users it is of interest to find out if a topic will be interesting or not. In the paper, we propose association learning to detect relationships. In order to verify the findings several experiments were executed based on social network analysis, in which the most influential users identified from rule learning were compared to the results from degree centrality and page rank. The results clearly indicate that it is possible to identify the users using rule learning. In addition, the results also indicates a lower execution time compared to state of the art methods.

UPDATE: 31.01.2016 The paper was submitted to the Entropy journal

Information referring to the intellectual property: the generally binding law in this area in the visited country and procedures of patenting;

-

Description of the procedure of cooperation between universities and SME in visited country: how it is organized, the sources of funding, the opinions about drawbacks and strengths of existing solution.

-

