

T-REX Report: Research Visit to CERTH-ITI, Thessaloniki, Greece

9 to 27 May 2005 by Lyndon Nixon, Free University Berlin

Topic/Goals:

Pursuing further co-operation between Semantic Web and multimedia research, both at the project level (EU NoE KnowledgeWeb and EU project AceMedia) and at the personal research level (my PhD work in multimedia systems and CERTH PhD student work in semantic multimedia).

Given the identification of common research themes of Semantic Web and multimedia, both within KnowledgeWeb and AceMedia, and the personal PhD interests of myself and students at CERTH, the aim of the exchange was to exchange knowledge, discover new opportunities for co-operation and to produce a basis for future publications, projects and other means of joint research and dissemination.

Activities:

(1) Strengthen cross-network co-operation

One of the activities of KnowledgeWeb is to promote co-operation between current EU projects and Networks of Excellence for mutual benefit based on common research interests. This activity is supported and monitored in the Workpackage 1.5.

Acemedia is an EU project focused on using semantic technologies to enable added value in multimedia services and systems to benefit end users, producers, network operators and manufacturers.

To date there has been little concrete co-operation between Acemedia and Knowledge Web. While multimedia is seen as a key Semantic Web area, few Knowledge Web researchers are focused on the particular needs of multimedia. As my research and that of CERTH do focus on multimedia, this is an opportunity to bring in Acemedia findings and raise their needs within KnowledgeWeb.

Acemedia has already provided an industrial use case to KnowledgeWeb. During my stay, we discussed how this use case could be used further, in order to ensure multimedia requirements are not overlooked in the industrial requirements analysis carried out by KnowledgeWeb. As a result we have brought in an Acemedia industrial partner Motorola to the KnowledgeWeb industrial board, and together with CERTH and Motorola will develop the Acemedia use case further within KnowledgeWeb.

(2) Write a joint paper synergizing PhD research work

CERTH PhD students are also working in the field of multimedia and semantics. We identified common interests between my PhD work (a conceptual modelling of the multimedia generation process) and the PhD work of Stamatia Dasiopoulou (a conceptual modelling for multimedia analysis). We have drawn up a draft paper which describes both our work, representing our joint findings in developing multimedia systems which rely on ontological knowledge for their (intelligent) operation. This paper will be submitted to the European Workshop on the Integration of Knowledge, Semantic and Digital Media technologies. This workshop is organised by Acemedia, and if accepted, the paper will be a KnowledgeWeb supported contribution to an up-and-coming workshop in a key and growing research area.

(3) Discuss future co-operation possibilities between our organisations

Both the Free University Berlin and CERTH-ITI are growing research groups which can benefit from a closer co-operation in key shared areas such as Semantic Web and multimedia. As a result of the exchange, we have now launched internal discussions leading towards a joint proposal for the EU 6th Framework Program Call 5.

Follow-up:

This exchange has laid the ground for a better co-operation between our institutions, which also is built upon closer personal co-operation between myself and researchers at CERTH, and aims for better co-operation between KnowledgeWeb and Acemedia.

We see the Acemedia use case as a key use case for providing industrial requirements in the sector of multimedia services and systems. Together with Motorola as industrial partner, the use case will be further developed in KnowledgeWeb.

A joint paper will be submitted to the European Workshop on the Integration of Knowledge, Semantic and Digital Media technologies. We see this synergy of PhD research as something that can be continued to mutual benefit, with the possibility of further joint papers in the future.

Finally, as institutions, opportunities for further working together are being sought, with the potential of a joint EU project proposal being made.