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Scientific Report on the Reciprocal Short Term Scientific Mission

From the 14th of February until the 2nd of March 2012 I performed a Reciprocal Short Term Scientific Mission (RSTSM) to Swinburne University of Technology in Melbourne, Australia. The mission was performed within the framework of COST Action IC0801 “Agreement Technologies”, where Swinburne University of Technology participates as an institution from a Reciprocal Agreement country. In the course of the RSTSM, the following activities involving me and the host institution were carried out:

- I visited two faculties of Swinburne University of Technology: Faculty of Information and Communication Technologies and Faculty of Design. In both faculties I had interesting discussions on the existing projects and on possible future collaboration. The discussions resulted in signing a collaboration agreement between my university and Swinburne University of Technology, involving its Faculty of Information and Communication Technologies and Faculty of Design.
- I worked together with the hosting professor Leon Sterling – Dean of the Faculty of Information and Communication Technologies – to improve the Proposal for Funding of the Australian Research Council (ARC) Discovery Project “Software engineering of people-oriented technologies and services”, which was submitted to the ARC. The proposal mentions me as an international collaborator.
- Professor Leon Sterling and I worked jointly on several papers that have been submitted by now.
- On the 24th of February 2012 I gave a seminar at the Faculty of Information and Communication Technologies on the topic “Towards societal information systems for healthcare”.
- We arranged a guest lecture of Professor Leon Sterling over a video conference to my university. The lecture was held on the 14th of March 2012 (the video recording of the lecture, as well as the lecture slides are available on the Web page http://maurus.ttu.ee/sts/?page_id=837).

The benefits of my RSTSM to the COST Action IC0801 “Agreement Technologies” are the following ones:

- The aforementioned papers on which Professor Leon Sterling and I jointly worked are concerned with agent-oriented modeling, which is an approach proposed by us (Sterling & Taveter, *The Art of Agent-Oriented Modeling*, MIT Press, 2009) for designing socio-technical systems – software intensive systems that have defined operational processes followed by human operators and which operate within organizations. Agent-oriented modeling is very relevant in the context of the “Organizations” working group of the COST Action IC0801 “Agreement Technologies”.
- We complemented the proposal “Intelligent Human-Agent Societies”, which has been submitted in response to the Open Call OC-2012-1-11445 by the European Cooperation in Science and Technology (COST).

Anticipated future collaboration resulting from my RSTSM can be described as follows:

- Joint writing and exchanging papers as well as joint industry-oriented research work between my department – Department of Informatics of Tallinn University of Technology – and two research groups under the Faculty of Information and Communication Technologies of Swinburne University of Technology: the Swinburne University Centre for Computing and Engineering Software Systems (SUCCESS) and the group of Research into Information Systems in Organizations (RISO). The contact people in the respective research groups are Professor Ryszard Kowalczyk and Professor Judy McKay.
- Joint industry-oriented research work between my university and the Faculty of Design of Swinburne University of Technology. As one of the concrete examples of this collaboration, on Monday, the 21st of May 2012 Director of External Research Engagement of the Faculty of Design Dr. Carolyn Barnes is going to visit Tallinn University of Technology.

Sincerely,

Kuldar Taveter