

Summary of the Scientific Report

COST Action IC0801, Reference Number STSM2009/55, Beneficiary: Stella M. Heras Barberá (PhD Student), Host: Dr. Peter McBurney, Period: 23.04.2009 - 30.06.2009

Purpose and results of the visit

The purpose of the visit was to advance research in the area of the Agreement Technologies COST Action IC0801, Workpackage 4 "Argumentation and Negotiation". The host institution, the Computer Science Department of the Liverpool University, is a high quality research centre with international reputation in the Argumentation and MAS areas. The visit also was intended to make connections with Argumentation experts and discuss current Argumentation research that has been developed in the framework of the Agreement Technologies project.

During the research stay, the work of the PhD student was guided by weekly meetings with Dr. Peter McBurney, Dr. Floriana Grasso and Dr. Katie Atkinson. Previous work on the development of a dialogue game protocol to manage recommendations in a social network of agents and the proposal of an argumentation framework that allow agents to follow efficient argumentation strategies and learn from the experience was discussed and reviewed.

In addition, new research on the application of the argumentation theory on social networks was also started. Regardless of the purpose of the social networking, in all on-line communities discussions arise from the difference of opinions between users and individual views are mixed in the tangle of user generated content posted in discussion boards, wikis and blogs. Therefore, there is an obvious need for mechanisms to structure this information and to elicit as much useful knowledge as possible from it.

We shown how Argumentation Theory can provide a valuable help to formalise and structure on-line discussions and user opinions. Argumentation can improve the user understanding about them and provide a means to evaluate what users have stated and why. A analysis on several well-know social networking services was developed and some examples on how argumentation schemes can be applied to clarify the process of reasoning that users have followed to come up with opinions were developed.

Future Collaboration

Currently, an article that reports the results of the research performed is being developed in collaboration between the PhD student and the host researchers. This report involves the first step to the application of argumentation schemes to social networking. Several new research opportunities have also been identified and will pave the way for future collaboration between both guest's and hosts' institutions.