

Departamento de Informática

Efficient Social Reasoning

Knowledge and Information Systems Group



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(Postdoctoral researcher)

Degrees:

2012: MSc from TU
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Objectives

A Social Abstract Argumentation Framework (SAAF) can be modelled as a graph with nodes represented by scored structured arguments and weighted edges expressing the attack relation.

The main goal of this project is to provide a set of efficient algorithms that allow reasoning on top of SAAFs that express a debate between web users about particular domains of interest. The methods will provide an information about the network in an online fashion.

Methodology

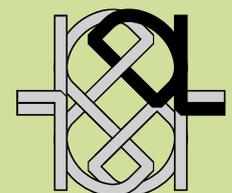
We are interested in characterizing the equilibria of a given SAAF and, thus, we represent it as a system of non-linear equations whose unique solution describes the desired model.

We adopt methods from Interval and Numerical analyses in combination with Genetic algorithms in order to solve such systems.

Expected Results

The result is a set of algorithms that are :

- mathematically sound and correct
- efficiently solve the particular problem
- amenable in specific domains
- scalable in specific network structures



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ERRO.
efficient reasoning with
rules and ontologies