

Departamento de Informática

## Social Abstraction Argumentation

Knowledge and Information Systems Group



CENTRIA



**Sinan Eğılmez**

(PhD Student)

**Degrees:**

2012: MSc from TU  
Dresden

2012: MSc from  
Universidad Politécnica de  
Madrid

**Advisor:** João Leite

## Objectives

In the present day, Web 2.0 a.k.a. The Social Web holds great importance as a medium for technological, scientific, political and social debates and exchange of knowledge. However these online platforms often prove to be unstructured.

As a consequence of such a chaotic nature, many users tend to abandon these platforms unsatisfied with the quality of their experience.

The object of this research is developing a self-managing online debating system that can appeal to different types of users with different levels of expertise and commitment in the debate, to be integrated with existing social networks.

## Methodology

The system will contain intuitive yet simple mechanisms for specifying arguments and the correlated attack relations, which will be embedded in a user-friendly debate structure with comprehensible rules.

The outcomes of the debates will be evaluated with automated reasoning methods. This will be realized by utilizing the structure of the argumentation graph and the weights of the elements of the graph hold as a result of the public vote. The final deductions will be reflected with a GUI where they're graphically depicted in an intelligible way.

## Expected Results

The ultimate outcome of the research is going to be a state of the art Social Abstract Argumentation model that enjoys desirable properties drawn from Argumentation Theory and Social Choice Theory and capable of dealing with the logical, social and dynamic structure of debates.

The final model is going to be implemented as an application for an existing Social Network.

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**Semantic  
Web**



**ERRO.**  
efficient reasoning with  
rules and ontologies