

Dispositif d'apprentissage automatique collaboratif pour la pratique du débat

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Abstract

The AREN-DIA project (ARgumentation and Digital - Didactics & Artificial Intelligence) aims to raise awareness of debate practices within both educational contexts and civil society discussions. The project is realized through the creation and testing of a debate platform. This platform allows for engaging in structured debates based on text, renewing the traditional approach to argumentative exchanges. It incorporates collaborative Natural Language Processing (NLP) technology to enhance the efficiency of the debate process. Our paper focuses on the challenges of the AI axis of the project, specifically, how to design a reinforcement mechanism that encourages users to participate in improving the AI system producing a structured representation of debate discourse. Thus, an automatic procedure complements the debate by suggesting key terms that synthesize the statements made. This indexing serves as the starting point for the machine's analysis and support of the debate. It is subject to completion by users who are invited to validate, invalidate, or supplement these key terms. To resolve semantic ambiguity, we employ an enrichment step for the terms to prepare them for the knowledge extraction operation based on Formal Concept Analysis (FCA). The knowledge, expressed in the form of implications, is utilized to update the relationships in the knowledge base that are leveraged during these processes.

Keywords: Knowledge extraction, Formal concept analysis, Thematic indexing, Semantic augmentation.