

Special Track on

Semantic, Logics and Information Extraction in AI

This special track is a forum for discussing the latest approaches in computational linguistics related to cognitive semantics and to artificial intelligence. Its aim is also to exchange ideas concerning the way of building efficient systems for language analysis based on cognitive semantic models. The need for flexible, adaptable, consistent and easy-to-use tools and platforms in a recent and active field such language engineering is indisputable. Some projects with this philosophy in mind have seen the light in the last years.

The ST contributions can be briefly characterized rom logic, by lexical meaning and syntactic structure, to ontologies and inference systems for complex linguistic analysis systems. This year, the focus of this track follows three directions: First, the development of computational models for syntactic and semantic analysis of language. Second, the development of resources (ontologies, bilingual dictionaries) of languages. Third, the development of data mining systems and of information extraction capturing more and more semantic features of languages. Belonging to the first direction, a new computational theory of meaning in natural language is presented; a computational model of conceptual metaphor and a computational model of a discourse structure are presented, as well. The second direction is represented by two papers: a paper discussing supervised classification of conceptualized text and a paper presenting a method to build a Czech-Russian bilingual dictionnary. As for the third direction, there are presented three papers containing new systems of information extraction. One of them proposes a method based on distant supervision (DS), the other is based on EXCOM method and the third one gives a method for structuring Wikipedia entities.

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