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Introduction

Welcome to the Coling Workshop on *Ontologies and Lexical Resources (OntoLex 2010).*

As human linguistic practice reveals, accessing to concepts through natural language is the implicit pathway for enabling mutual comprehension and effective meaning negotiation between agents in a community. But, in order to exchange knowledge, we need to share the *conceptual models underlying the lexicon*, namely ontologies. These remarks become even more crucial when focusing on human-computer interaction. In this context, computational ontologies and human-language technologies converge in the task of providing the semantic description of knowledge contents (e.g. multimedia, web resources, services, etc.): underlying intended models need to be made explicit in order to become accessible by artificial agents and sharable with humans. According to this picture, 1) computational lexicons, whose aim is to make lexical-content machine-understandable, constitute a fundamental component to foster the (mono- and multi-linguistic) access to any knowledge content; 2) computational ontologies, on the other side, are necessary to capture the logical structure of those knowledge contents: both contribute to dig out the basic elements of a given semantic space (domain-dependent or general), characterizing the different relations holding among them.

In this general framework, the contributions presented under the scope of OntoLex 2010 (Ontologies and Lexical Resources) show in fact a variety of approaches under many respects. Some of the papers are oriented to describe the different construction processes of semantic resources (e.g., Daoud et al. and Nagata deal with two approaches based on Wikipedia), other papers are especially concerned with specific tasks and applications. Regarding the latter aspect, some contributions present proposals to enhance interoperability within the various standardization formats for linguistic and terminological descriptions (Peters, Vossen et al.) as well as exploiting specific algorithms for ontology matching. Some papers also focus on formal ontology, both at the level of theoretical analysis and at the level of specific categories and relations (see for example the paper by Bogulaslavsky). The investigated domains span from bio-surveillance (Conway et al.) through medicine; sentiment/opinion mining confirms to be an emergent area of interest too (see Cadilhac et al.). Automatic techniques and algorithms to extract terms and taxonomies are also introduced (Van der Plas, Nagata et al., vor der Brueck).

Originating in 2000, OntoLex is recognized as a common *meeting place* by a constantly growing interdisciplinary community of lexicographers, ontologists and computational linguists. Traditionally represented by researchers and practitioners from a variety of backgrounds (acquisition of lexical knowledge, ontology-based approaches to information extraction, ontology learning, ontology matching, etc.), OntoLex 2010's contributions confirm this trend in the Sixth edition of the workshop too, hosted by COLING conference for the first time. We think that the comprehensive perspective emerging from the 10 articles collected in these proceedings can help in progress towards next-generation knowledge systems based on the integration between ontologies and lexical resources.

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