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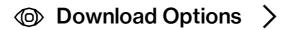
OntoLearn Reloaded: A Graph-Based Algorithm for Taxonomy Induction

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Abstract Full Text Authors

In 2004 we published in this journal an article describing OntoLearn, one of the first systems to automatically induce a taxonomy from documents and Web sites. Since then, OntoLearn has continued to be an active area of research in our group and has become a reference work within the community. In this paper we describe

approaches in the literature, our novel algorithm

learns both concepts and relations entirely from

definitions, and hypernyms. This results in a very

scratch via the automated extraction of terms,

hypernym graph. The algorithm then induces a

taxonomy from this graph via optimal branching and a novel weighting policy. Our experiments show that we obtain high-quality results, both when building brand-new taxonomies and when

dense, cyclic and potentially disconnected

reconstructing sub-hierarchies of existing

our next-generation taxonomy learning methodology, which we name OntoLearn Reloaded. Unlike many taxonomy learning

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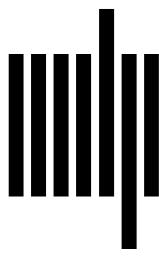
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