

Multilinguality at Your Fingertips: BabelNet, Babelfy and Beyond!

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Abstract.

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Multilinguality is a key feature of today's Web, and it is this feature that we leverage and exploit in our research work at the Sapienza University of Rome's Linguistic Computing Laboratory, which I am going to overview and showcase in this talk.

I will start by presenting BabelNet 3.0, available at <http://babelnet.org>, a very large multilingual encyclopedic dictionary and semantic network, which covers 271 languages and provides both lexicographic and encyclopedic knowledge for all the open-class parts of speech, thanks to the seamless integration of WordNet, Wikipedia, Wiktionary, OmegaWiki, Wikidata and the Open Multilingual WordNet.

Next, I will present Babelfy, available at <http://babelfy.org>, a unified approach that leverages BabelNet to jointly perform word sense disambiguation and entity linking in arbitrary languages, with performance on both tasks on a par with, or surpassing, those of task-specific state-of-the-art supervised systems.

Finally I will describe the Wikipedia Bitaxonomy, available at <http://wibitaxonomy.org>, a new approach to the construction of a Wikipedia bitaxonomy, that is, the largest and most accurate currently available taxonomy of Wikipedia pages and taxonomy of categories, aligned to each other. I will also give an outline of future work on multilingual resources and processing, including state-of-the-art semantic similarity with sense embeddings.

Mots-clés : multilinguisme, dictionnaire, sémantique, désambiguïsation, taxonomie.

Keywords: multilinguality, dictionary, semantic, disambiguation, taxonomy.