

# Scaling Semantic Role Labeling and Semantic Parsing Across Languages

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**Abstract.** Sentence-level semantics is hampered by the lack of large-scale annotated data in non-English languages. In this talk I will focus on two key tasks aimed at enabling Natural Language Understanding, that is, Semantic Role Labeling (SRL) and semantic parsing, and put forward innovative approaches which we developed to scale across languages. I will show you how new, language-independent techniques - including new deep learning architectures and high-quality silver data creation, as well as a brand-new, wide-coverage, multilingual verb frame resource, namely VerbAtlas - will help significantly close the gap between English and low-resource languages, and achieve the state of the art across the board.

## 1 Short Biography

Roberto Navigli is a professor of Computer Science at the Sapienza University of Rome, where he leads the Sapienza NLP Group. He is one of the few researchers to have received two prestigious ERC grants in computer science on multilingual word sense disambiguation (2011-2016) and multilingual language- and syntax-independent open-text unified representations (2017-2022). In 2015 he received the META prize for groundbreaking work in overcoming language barriers with BabelNet, a project also highlighted in The Guardian and Time magazine, and winner of the Artificial Intelligence Journal prominent paper award 2017. He is the co-founder of Babelscape, a successful company which enables Natural Language Understanding in dozens of languages. He is a Program Chair of ACL-IJCNLP 2021.