

Towards Universal Syntactic Processing of Natural Language (invited talk)

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1 Abstract

In this talk I will first describe some techniques for projecting syntactic information across language boundaries, allowing us to build models for languages with no labeled training data. I will then present some ongoing work towards a universal representation of morphology and syntax that makes it possible to model language phenomena across language boundaries in a consistent way. Finally, I will highlight some examples of how we have successfully used syntax at Google to improve downstream applications like question answering and machine translation.

2 Author's Biography

Slav Petrov is a researcher in Google's New York office, leading a team that works on syntactic parsing and its applications to information extraction, question answering and machine translation. He holds a PhD degree from UC Berkeley, where he worked with Dan Klein. Before that he completed a Master's degree at the Free University of Berlin and was a member of the FU-Fighters team that won the RoboCup world championship in 2004. His work on fast and accurate multilingual syntactic analysis has been recognized with best paper awards at ACL 2011 and NAACL 2012. Slav also teaches Statistical Natural Language Processing at New York University.