[CICLING 2010: 11th International Conference on Intelligent Text Processing and Computational Linguistics, March 21-27, 2010, Iaşi, Romania]

Abstract

Marcin Junczys-Dowmunt. A Maximum Entropy Approach to Syntactic Translation Rule Filtering

In this paper we present a maximum entropy filter for translation rules of a statistical machine translation system based on tree transducers. This filter can be successfully applied for the reduction of the number of translation rules by more than 70% without negatively affecting translation quality as measured by BLEU. For some filter configurations translation quality is even improved. Our investigations include a discussion of the relationship of Alignment Error Rate and Consistent Translation Rule Score with translation quality in the context of Syntactic Statistical Machine Translation.