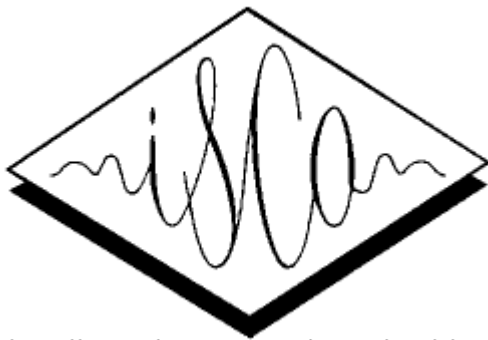


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Statistical Machine Translation and its Challenges

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In addition to speech recognition and syntactic parsing, during the last 10 years, the statistical approach has found widespread use in machine translation of both written language and spoken language. In many comparative evaluations, the statistical approach was found to be competitive or superior to the existing conventional approaches. Since the first statistical approach was proposed at the end of the 80s, many attempts have been made to improve the state of the art. Like other natural language processing tasks, machine translation requires four major components: a decision rule, a set of probability models, a training criterion and an efficient generation of the target sentence. We will consider each of these four components in more detail and point out promising research directions.

[Full Paper](#)

Bibliographic reference. Ney, Hermann (2004): "Statistical machine translation and its challenges", In *INTER_SPEECH-2004*, 361-364.