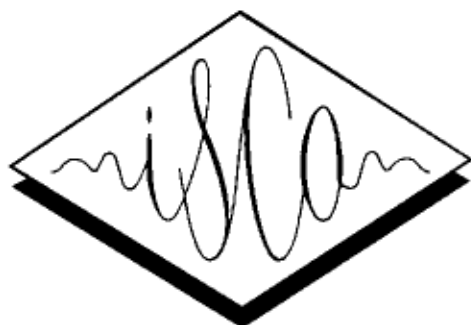


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**A Phrase-Level Machine Translation Approach for Disfluency
Detection Using Weighted Finite State Transducers**

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We propose a novel algorithm to detect disfluency in speech by reformulating the problem as phrase-level statistical machine translation using weighted finite state transducers. We approach the task as translation of noisy speech to clean speech. We simplify our translation framework such that it does not require fertility and alignment models. We tested our model on the Switchboard disfluency-annotated corpus. Using an optimized decoder that is developed for phrasebased translation at IBM, we are able to detect repeats, repairs and filled pauses for more than a thousand sentences in less than a second with encouraging results.

[Full Paper](#)

Bibliographic reference. Maskey, Sameer / Zhou, Bowen / Gao, Yuqing (2006): "A phrase-level machine translation approach for disfluency detection using weighted finite state transducers", In *INTER_SPEECH-2006*, paper 1886-Tue1A1O.2.