

INTERSPEECH 2006 - ICSLP Ninth International Conference on Spoken Language

Pittsburgh, PA, USA September 17-21, 2006

Processing



Performance Improvement of Dialog Speech Translation by Rejecting Unreliable Utterances

Toshiyuki Takezawa, Tohru Shimizu

NICT, Japan

We discuss how to measure the reliability of recognized utterances based on a confidence measure, and applied it to a dialog speech translation system. In this study, we employ generalized word posterior probability (GWPP), a confidence measure for verifying recognized words, and expand it to measure the reliability of recognized utterances. We confirmed the performance improvement by applying the rejection technique to a dialog speech translation system from Japanese to English. We conducted two kinds of performance evaluation. One is a ranking evaluation of translation output by human evaluators. The other is to measure the machine output against human results by a paired-comparison method. Both of them yield significant improvements.

Full Paper

<u>Bibliographic reference.</u> Takezawa, Toshiyuki / Shimizu, Tohru (2006): "Performance improvement of dialog speech translation by rejecting unreliable utterances", In *INTERSPEECH-2006*, paper 1100-Tue2CaP.6.

1 of 1 23/06/2010 10:35