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**Processing** 



## **High-Quality Speech Translation in the Flight Domain**

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Portability is an important issue to the viability of a domain-specific translation approach. This paper describes an English to Chinese translation system for flight-domain queries, utilizing an interlingua translation framework that has been successfully applied in the weather domain. Portability of various components is tested, and new technologies to handle parse ambiguities and ill-formed inputs are developed to enhance the translation framework. Evaluation of translation quality is conducted manually on a set of 432 unseen flight-domain utterances, which are translated into Chinese using a formal method and a new robust back-off method in tandem. We achieved 96.7% sentence accuracy with a rejection rate of 7.6% on manual transcripts, and 89.1% accuracy with an 8.6% rejection rate on speech input. A game for language learning using the translation capability is currently under development.

## **Full Paper**

<u>Bibliographic reference.</u> Wang, Chao / Seneff, Stephanie (2006): "High-quality speech translation in the flight domain", In *INTERSPEECH-2006*, paper 1135-Tue1A1O.5.

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