

# Automatic Text Dictation in Computer-Assisted Translation

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In this paper, we study the incorporation of statistical machine translation models to automatic speech recognition models in the framework of computer-assisted translation. The system is given a source language text to be translated and it shows the source text to the human translator to translate it orally. The system captures the user speech which is the dictation of the target language sentence. Since the system has simultaneous access to the source language text and the speech signal of the target language text, it is possible to improve the speech recognition accuracy by incorporating the statistical machine translation models. We show that statistical translation models have a high impact on improving the speech recognition results. Using these models, we achieve a relative word error rate reduction of 17%.

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