

# **Position Paper for CHI 2002 Workshop: Robustness in Speech Based Interfaces**

**Matthias Peissner**

Fraunhofer Institute for Industrial Engineering IAO

Nobelstr. 12

D-70569 Stuttgart, Germany

+49 711 970 2311

matthias.peissner@iao.fhg.de

## **INTRODUCTION**

Accurate functioning of the automatic speech recognition (ASR) is an important aspect of the quality of use of a speech application. However, total elimination of recognition errors will not be possible in the near future. Moreover, the ASR performance is by far not the outstanding determinant for successful and satisfying use. Our previous usability tests suggest that for rates of correct recognition between 0.6 and approximately 1 only about 25% of the variance of objective and subjective usability measures can be declared by fluctuating recognition rates. That means that even with relatively poor ASR performance several subjects were able to efficiently reach their goals and rated the application favourable on satisfaction and demanded effort. On the other hand, reliable speech recognition was not necessarily associated with successful task completion and positive judgements. Such situations mostly pointed out special characteristics of the voice user interface (VUI): effective means of error management or obvious design deficits.

...

**For more information, contact the author.**