



International Conference on Computational Processing of Portuguese Language
Applications of Portuguese Speech and Language Technologies

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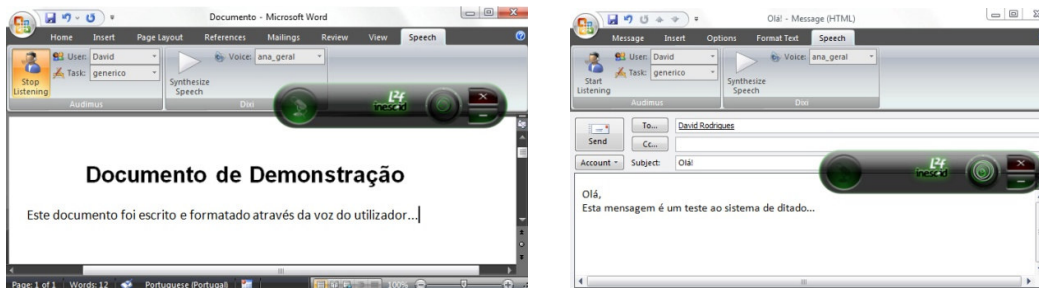
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A SPOKEN INTERFACE FOR AN OPERATING SYSTEM

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The intention of the presented system is to provide a sophisticated interface between users and desktop applications. The system focuses on speech interaction potentialities, empowering people to interact with their applications by voice. It is designed to allow a significant reduction of mouse and keyboard use, while preserving or even boosting the overall productivity of human users.

The platform supports speech input and output, respectively, through automatic speech recognition and text-to-speech engines. The target language intended for the voice modality is the European Portuguese.

Recognized words are used for different purposes. With command and control, the speech interface makes speakers able to give orders to the applications. On the other hand, with dictation, the spoken input is not interpreted and is exclusively converted in text format.

The ability to enter data into templates or custom applications efficiently has also been taken in account. Highly attention has been paid to the integration of speech into the user's workflow. We have also made the speech technologies more practical by creating customized shortcuts to easily operate their features.

We will use this demonstration to expose the possibilities, created by our system, in order to enhance user interaction with application interfaces.

We will start by showing a generic set of commands which allows the navigation through the desktop environment, as 'open calculator'. After we will demonstrate the use of spoken interaction within the context of word processing and email applications. In these particular situations the speech interface allows people to dictate to their computers and have their speech automatically transcribed. The interface also enables innumerable ways to control these environments with voice. Selecting portions of text, correcting sentences, synthesizing documents, and selecting menu options are just some of the interaction possibilities.