

Automatic Speech Recognition Systems Performance Evaluation Using Word Error Rate Method

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Abstract : The human verbal communication is a two-way process which requires a mutual understanding that will result in some considerations. This kind of communication, also called dialogue, besides the supposed human agents it can also be performed between human agents and machines. The interaction between Men and Machines, by means of a natural language, has an important role concerning the improvement of the communication between each other. Aiming at knowing the performance of some speech recognition systems, this document shows the results of the accomplished tests according to the Word Error Rate evaluation method. Besides that, it is also given a set of information linked to the systems of Man-Machine communication. After this work has been made, conclusions were drawn regarding the Speech Recognition Systems, among which it can be mentioned their poor performance concerning the voice interpretation in noisy environments.

Keywords : automatic speech recognition, man-machine conversation, speech recognition, spoken dialogue systems, word error rate

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