# THE DEVELOPMENT LANGUAGE KNOWLEDGE FOR DEVELOPMENT SPEECH RECOGNITION APPLICATION

Nicolae OBJELEAN

Current speech recognition systems are highly vocabulary-dependent, because training on one vocabulary and testing on another leads to a substantial performance degradation. Thus, in order to optimize performance [1], with current technology, it appears that vocabulary-specific training is necessary. We proposed to build systems for rapidly creation of language recourses, which need to resolve two problems of current speech recognition and speech synthesis of natural language. We deal with the problem adaptation of automatic speech recognition systems for new vocabulary and language. For that aims we proposed building systems for creation linguistics knowledge. The ended goal of this research is to design a speech recognition and synthesis systems that can be rapidly configured for any vocabulary adaptation for new task and language. We described the architecture in which two knowledge sources generate constraints that guide a phonetic recognizer.
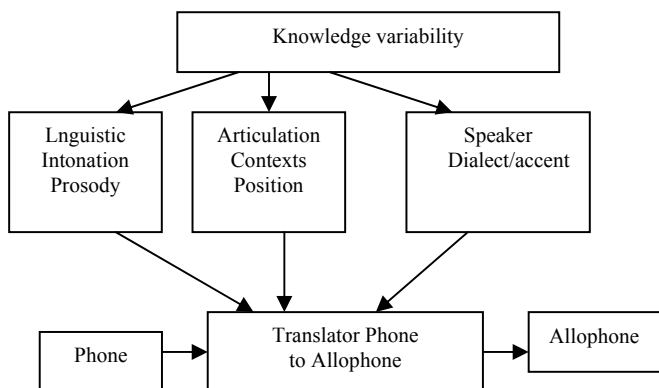
Bibliografie:

1. XUEDONG, H., ACERO, A. and HON, Hsiao-Wuen. *Spoken Language Processing: A Guide to Theory. Algorithm and System Development*. Carnegie Mellon University, p. 230-231, 2001.