Automating the creation of speech recognition systems for under-resourced languages

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Abstract

© 2015 IEEE.More than 7100 languages are spoken in the world and the significant part of these languages suffers frothe absence of speech services, therefore people cannot use them on their native languages and have to learn and use other languages in order to communicate with modern information technologies. This paper describes an approach to automate the creation of speech recognition systems for under-resourced languages. The aim is to simplify and speed up this process via providing the necessary tools and organizing the process of systems' development and testing. The results of building phoneme and speech recognition systems for the Tatar language (3rd most spoken language in Russia) demonstrate the possibility of using the proposed platform for under-resourced languages.

Keywords

speech recognition, the Tatar language, under-resourced languages