

A Cross-Gender Statistical Analysis of Tuvinian Intonation Features in Comparison With Uzbek and Azerbaijani

Authors : Daria Beziakina, Elena Bulgakova

Abstract : The paper deals with cross-gender and cross-linguistic comparison of pitch characteristics for Tuvinian with two other Turkic languages - Uzbek and Azerbaijani, based on the results of statistical analysis of pitch parameter values and intonation patterns used by male and female speakers. The main goal of our work is to obtain the ranges of pitch parameter values typical for Tuvinian speakers for the purpose of automatic language identification. We also propose a cross-gender analysis of declarative intonation in the poorly studied Tuvinian language. The ranges of pitch parameter values were obtained by means of specially developed software that deals with the distribution of pitch values and allows us to obtain statistical language-specific pitch intervals.

Keywords : speech analysis, statistical analysis, speaker recognition, identification of person

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