UW CENTER FOR
PATTERN ANALYSIS AND MACHINE INTELLIGENCE

GRADUATE SEMINAR SERIES

Spectral Energy Distribution for Emotional Speech Recognition

Speaker: Pouria Fewzee

Date: July 11, 2012

Time: 4:00 pm – 4:30 pm

Place: E5 (5128) Refreshments will be served

Abstract :

Emotional speech recognition is the problem of discriminating speech samples by their emotional content. Our solution to this problem lies on three areas: signal processing, computational linguistics, and statistical learning. At signal processing and computational linguistics levels, identification and extraction of speech features is concerned; proposed in this work is a set of acoustic and linguistic speech features. On the other hand, at the statistical learning level, capturing the sources of variation between features and emotional contents of speech is of interest. To address this problem, in the framework of conditional random fields, we propose a model for emotional speech. The proposed model takes account of acoustic and linguistic features. According to preliminary results of this study, the proposed set of acoustic features show capable of giving a sparse representation of emotional contents of speech, while keeping up with the prediction accuracy of the commonly used acoustic features.

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