

# Prosody Labeling and Modeling for Mandarin Spontaneous Speech

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## Abstract

An unsupervised joint prosody labeling and modeling (PLM) method for exploring the prosody of spontaneous Mandarin speech is proposed. It is designed to automatically label a speech corpus and construct prosodic models simultaneously. Experimental results on a large dialog corpus confirmed its effectiveness. Many meaningful characteristics of spontaneous-speech prosody were investigated from the parameters of the well-trained prosodic models. The prosodic feature patterns of high-level constituents of the postulated prosody hierarchy were derived. An analysis of disfluencies related to the labeling results was also discussed. Those findings would provide rich prosodic information for various speech processing applications.

Keyword : Prosody Labeling and Modeling 、Mandarin Spontaneous Speech