

HQSYN16 - Task #3699

Task # 3680 (New): RA4a - Automatic error prediction

Task # 3698 (Closed): Experiment with one-class classification for join cost enhancements

Compute features (MFCC, LPC, LPCenv and FFTpow)

15.01.2016 16:36 - Tihelka Dan

Status:	Closed	Start date:	15.01.2016
Priority:	Normal	Due date:	24.01.2016
Assignee:	Tihelka Dan	% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:	RA4: Automatic error prediction and signal modification		
Description			
For the whole DB compute features like:			
<ul style="list-style-type: none">• pitch-asynchronous/pitch-synchronous MFCC• pitch-asynchronous/pitch-synchronous LPC• pitch-asynchronous/pitch-synchronous FFT power			
For pitch-synchronous parameterization use static window size to avoid zeros in FFT. Store them in ASF files (like candsel features used now).			

History

#1 - 19.01.2016 14:24 - Tihelka Dan

- % Done changed from 0 to 10

Features computed (not all yet, though, just those following the paper, i.e. 20-20 (20msec windows, 20msec shift) MFCC, LPC and FFTpow). The next step is to compute distance vectors.

#2 - 22.01.2016 15:22 - Matoušek Jindřich

- Target version set to RA4: Automatic error prediction and signal modification

#3 - 22.02.2016 10:00 - Tihelka Dan

- Status changed from Assigned to Resolved

- % Done changed from 10 to 100

Distances computed. Starting to experiment with one-class-classifier.

#4 - 01.04.2016 10:32 - Tihelka Dan

More details about the whole experiment described in Interspeech 2016 paper, see [#3809](#).

#5 - 01.04.2016 10:33 - Tihelka Dan

Another set of features computed: 04-20 (20msec windows, 4msec shift), MFCC, LPC, LPCenv and FFTpow. Also distances are going to be computed and the performance of classifiers compared.

#6 - 20.04.2016 10:37 - Tihelka Dan

Experiments with distances among MFCC, LPC, LPCenv and FFTpow feature vectors, computed for signal framing:

- 20-20 (20msec windows, 20msec shift)
- 04-25 (25msec windows, 4msec shift)
- 12-25 (25msec windows, 12msec shift)
- pm-25 (25msec windows, pitch-synchronous shift)

were submitted to SpeCom 2016 conference (<http://specom.nw.ru/>).

Results are mixed, we need to focus on error analysis now.

#7 - 20.04.2016 10:38 - Tihelka Dan

- Subject changed from Compute features to Compute features (MFCC, LPC, LPCenv and FFTpow)

#8 - 20.04.2016 10:38 - Tihelka Dan

- Status changed from Resolved to Closed