

Description of the context-dependent label used by HMM-based Brazilian Portuguese speech synthesis

Ranniery Maia

21st May 2004

$m1 \wedge m2 - m2 + m4 = m5$ /M2: $m6_m7$
 /S1: $s1_@s2 - s3_@s4 + s5_@s6$ /S2: $s7_s8$ /S3: $s9_s10$ /S4: $s11_s12$ /S5: $s13_s14$ /S6: $s15$
 /W1: $w1_#w2 - w3_#w4 + w5_#w6$ /W2: $w7_w8$ /W3: $w9_w10$ /W4: $w11_w12$ /W5: $w13$
 /P1: $p1_!p2 - p3_!p4 + p5_!p6$ /P2: $p7_p8$
 /U: $u1_\$u2_&u3$

m1	phone before previous phone
m2	previous phone
m3	current phone
m4	next phone
m5	phone after next phone
m6	position of current phone in current syllable (forward)
m7	position of current phone in current syllable (backward)
s1	whether previous syllable is stressed or not (0 → no; 1 → yes)
s2	number of phones in previous syllable
s3	whether current syllable is stressed or not (0 → no; 1 → yes)
s4	number of phones in current syllable
s5	whether next syllable is stressed or not (0 → no; 1 → yes)
s6	number of phones in next syllable
s7	position of current syllable in current word (forward)
s8	position of current syllable in current word (backward)
s9	position of current syllable in current phrase (forward)
s10	position of current syllable in current phrase (backward)
s11	number of stressed syllables before current syllable in current phrase
s12	number of stressed syllables after current syllable in current phrase
s13	number of syllables, counting from the previous stressed syllable to the current syllable in the utterance
s14	number of syllables, counting from the current syllable to the next stressed syllable in the utterance
s15	vowel of current syllable
w1	part-of-speech classification of previous word
w2	number of syllables in previous word
w3	part-of-speech classification of current word
w4	number of syllables in current word
w5	part-of-speech classification of next word
w6	number of syllables in next word
w7	position of current word in current phrase (forward)
w8	position of current word in current phrase (backward)
w9	number of content words before current word in current phrase
w10	number of content words after current word in current phrase
w11	number of words counting from the previous content word to the current word in the utterance
w12	number of words counting from the current word to the next content word in the utterance
w13	interrogation flag of current word
p1	number of syllables in previous phrase
p2	number of words in previous phrase
p3	number of syllables in current phrase
p4	number of words in current phrase
p5	number of syllables in next phrase
p6	number of words in next phrase
p7	position of current phrase in the utterance (forward)
p8	position of current phrase in the utterance (backward)
u1	number of syllables in the utterance
u2	number of words in the utterance
u3	number of phrases in the utterance