

Auralization and Sonification

Med8 2011

Lecture 2 Exercises

Find and download a copy of the following paper:

Cambouropoulos E. (2001). *The Local Boundary Detection Model (LBDM) and its Application in the Study of Expressive Timing*. In *Proceedings of the International Computer Music Conference (ICMC'2001)* 17-22 September, Havana, Cuba.

(Hint: Google it!)

Now answer the following questions. (The order of the questions follows that of the paper.)

1. Is it generally hypothesized that performers speed up or slow down at the ends of phrases?
2. What is meant by “quantised score and non-quantised performance data”?
3. What form does the output of the LBDM take and what does the output represent?
4. What does the author mean by a “parametric profile” of a melody?
5. Give two reasons stated in the paper for why LBDM is not expected to find all local boundaries correctly?
6. What is the maximum value of a boundary strength in LBDM?
7. How are boundaries predicted from the boundary strength profile of a melody?
8. On what grounds does the author claim that “overall the LBDM performance was comparable to the performance of the punctuation rule system”? Is this claim justified?
9. Can the LBDM be applied to polyphonic music?
10. Do the results in Table 2 support the hypothesis that the final notes of phrases are lengthened?
11. In Table 2, does the word “boundary” refer to a predicted boundary or an actual boundary? What about in Table 3?
12. The author suggests that performers typically indicate the ends of phrases not by lengthening the last note, but by what other means?