DOWNBEATER: AUDIO DOWNBEAT ESTIMATION TASK

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ABSTRACT

This very short abstract describes our submission for the audio downbeat estimation task. Our approach uses drum specific onset detection functions which capture kick and snare drum events combined a harmonic change function. These are passed to a dynamic programming beat tracking algorithm. After which a set of beat synchronous harmonic, kick, snare and structural segmentation features are combined and passed to a Viterbi decoding algorithm which returns a set of downbeat estimates. Note, this algorithm has been optimised for 4/4 pop music, so it might not do very well on other types of music!

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