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A vector classifier for sound similarity classification based on audio features

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This study introduces a vector classifier for Sound Similarity Classification. Sound classification using the known features can be accepted as the prime definition within a limited time. However, the sound is a function not only of spectral composition but also a change of this composition in time. Then, it should be characterized with flexible classifier vectors as a function of time segment. The study considers (1) steady-state time segmentation of sound with respect to feature deviations and creating time-marked classifier vectors within the segment made of the known features and (2) using long-time combined segments and histogram base classifiers within the classifier vector. The main subject of the work is the reduction of memory and computation time effectiveness and similarity detection capability.

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