Abstract

In pattern recognition applications, finding compact and efficient feature set is important in overall problem solving. In this paper, feature analysis using wavelet coefficient histogram for the musical instrument recognition has been presented and compared with traditional features. The new proposed wavelet coefficient histograms features found compact and efficient with existing traditional features. With this work it is justified that the musical instrument information is available in particular frequency sub bands and can be easily extracted using wavelet features. The proposed wavelet based features shows better accuracy than existing traditional features. The database used in this work is from Mc Gill university, Canada. The work is
carried out with 18 Musical instrument from different musical instrument families.

References

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Musical Instrument Recognition using Wavelet Coefficient Histograms

Index Terms
Computer Science  Pattern Recognition

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Musical Instrument Recognition; Wavelet Transform  Feature Extraction