Abstract

Analyzing Phonocardiogram signals for Automatic Identification system by Binary Decision Tree based Support Vector Machine is a new approach in the research and this paper examines the applicability of the biometric properties of the Heart Sounds. It is a highly reliable method as it cannot be forged and difficult to disguise. This reduces falsification with highly accurate results. Multi-pass Moving Average Filters (MAF) smoothes the up-sampled DWT coefficients and the peaks are detected by Averaging the Neighbors. Spectral Features are extracted and clustered by HSOM. Rough sets Theory (RST) select the best features for classification. Binary Decision Tree based Support Vector Machine is used as a classifier for recognition and Identification.

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Index Terms
Computer Science
Signal Processing

Keywords
Phonocardiogram  DWT  Threshold  Self-Organizing Maps  Rough sets  SVM.