ECG is a graphical record of the electrical tension of heart and has established as one the most important bio-signal used by cardiologists for diagnostic purposes and further to adopt an appropriate course of treatment. The difficulties faced in interpretation of ECG signals forced researchers to study about automatic detection of cardiac arrhythmia disorders. The data analysis techniques using specific computer software could easily interpret complex ECG signals, predict presence or absence of cardiac arrhythmia. This provides real time analysis and further facilitates for timely diagnosis. In this paper, Support Vector Machine (SVM) technique, using LibSVM3.1 has been applied to ECG dataset for arrhythmia classification in five categories. Out of these five categories, one is normal and four are arrhythmic beat categories. The dataset used in this study is 3003 arrhythmic beats out of which 2101 beats (70%) are used for training and remaining 902 beats (30%) have been used for testing purpose. Total performance accuracy is found to be around 95.21 % in this case.
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Index Terms

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