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Abstract

The classification of nonstationary signals in a noisy environment is a difficult task. In this paper a modified version of S-Transform technique has been proposed for classification of power signal disturbances. The S-Transform is a signal processing technique which is used for visual localization, detection, pattern classification. S-Transform has good ability in gathering high frequency signals and suppressing the lower frequency signal. The S-Transform has been used to extract features from the nonstationary power disturbance signals. The extracted features are fed as the input support vector machine classifier for power signal disturbance pattern classification. To enhance the pattern classification accuracy the extreme learning

classifier has been proposed and comparison results has been presented

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