



## AUTOMATIC SLEEP SPINDLE DETECTION AND LOCALIZATION ALGORITHM (ThuAmPO3)

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### ★ Abstract :

In this study, a new approach is presented for analysis of EEG signals and detection and localization of sleep spindles. For automatic detection of sleep spindles, short term frequency analysis is applied to EEG data. These techniques are; Short Time Fourier Transform, and Wavelet Transform. After the detection of sleep spindles, Teager Operator is applied to determine the duration of the spindle. By this approach we achieved 96% true localization of sleep spindles.