

SLEEP STAGE CLASSIFICATION USING WAVELET TRANSFORM & NEURAL NETWORK

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ABSTRACT

In this paper the feature extraction of the EEG Signal is done by computing the Discrete Wavelet Transform. The wavelet transform coefficients compress the number of data points into few features. Various statistics were used to further reduce the dimensionality. The Classification of the EEG sleep stages is done by using neural network which provides more accurate sleep stage classification compared to other techniques.

KEY WORDS: Electroencephalogram (EEG), Artificial Neural Network (ANN), DWT (Discrete Wavelet Transform), Back Propagation Neural Network (BPN), Standard Deviation (SD).