Abstract

Intelligent computing methods and knowledge based systems are well known techniques used for the detection of various medical disorders. This paper is based on the review of various intelligent computing methods that are used to detect sleep disorders. The main concern is based on the detection of sleep disorders such as sleep apnea, insomnia, parasomnia and snoring. The most common diagnostic methods used by many researchers are based on knowledge-based system (KBS), rule based reasoning (RBR), case based reasoning (CBR), fuzzy logic (FL), artificial neural network (ANN), support vector machine (SVM), multi-layer perceptron (MLP) neural network, genetic algorithm (GA), k-nearest neighbor (k-NN), hybrid neural network, bayesian network (BN), data mining (DM) and many other integrated approaches. In traditional approach questionnaire was used for the detection of various disorders that is now overcome with all above mentioned techniques to enhance the accuracy, sensitivity and specificity.

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Index Terms

Networks

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Keywords

RBR  CBR  ANN  GA  DM  FL  BN  Intelligent computing techniques