Abstract

Sleep plays a vital role in the life of human being and in convention of neuro-science. But some time, sleep is disrupted along with unusual behaviors associated with it. A numerous techniques and methods are adopted by many researchers for the diagnosis of disruptions to sleep along with the other sleep disorders and also for the diagnosis of unusual behavior linked with sleep that can also increase the sleep disruptions. In this paper, a fuzzy inference system (FIS) is developed for the diagnosis of sleep disorders like Sleep Apnea, Insomnia, Parasomnia and Snoring. The dataset considered in this study is collected from various physicians. To construct the fuzzy inference system, three membership functions are used like low, medium and high. The range for all these membership functions is set according to their importance in the respective disease. A record of 140 patients is considered in this work. The accuracy achieved from the proposed system is 89.2%.

References

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Index Terms

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Keywords
| Fuzzy Logic | Membership Functions | Sleep Disorders |