عنوان مقاله:

Presenting a Real Time Method for Automatic Detection of Diabetes Based on Fuzzy Reward-Penalty System

محل انتشار:

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خلاصه مقاله:

Nowadays diabetes disease is one of the main problems of health domain and it's known as the fourth factor of death in the world. The main problem with this dangerous disease is the late or weak diagnosis. The reason of weak diagnosis is because sometimes doctors aren't able to select the right patterns or they can't use the standard patterns very well, so the outcome is that the disease will be diagnosed by the patients when it has become late for controlling or curing it. Therefore, implementing a method which can help each person to have an authentic diagnosis of being or not being affected to this disease; can be an important step for prevention and controlling this special disease at the beginning of it. In this paper, a new method is presented for diagnosing diabetes disease which is able to extract the proper knowledge by helping to cluster and analyze the training patterns, after that in recognition phase it can diagnose diabetes disease precisely and fast via a fuzzy reward-penalty mechanism. For evaluating the proposed method, PIMA dataset has been used. The experimental results show that the proposed method has a better performance compared to other existing methods.

کلمات کلیدی:

Diabetes Diagnosis, Machine Learning, Clustering, Classification

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