## عنوان مقاله:

Toward a High-Accuracy Hybrid System for Cardiac Patient Data Analysis using C-Means Fuzzy Clustering in Neural Network Structure

## محل انتشار:

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## خلاصه مقاله:

The main problem related to heart disease is the lack of timely diagnosis or the general weakness in the diagnosis of this disease, which is also due to the lack of selection of the appropriate model by the doctor or the lack of proper use of standard models. One of the essential applications of data mining techniques is related to medicine and disease diagnosis. One of the data mining techniques is information clustering. This paper will try to provide a model for the diagnosis of heart disease and its improvement in terms of accuracy on the standard UCI heart database. In this research, with a comprehensive and complete review of the C-Meaning fuzzy clustering method and neural networks in the field of heart disease prediction, an attempt is made to improve these solutions and provide new solutions in this field. The main goal is to combine these two data mining algorithms, both of which alone showed the highest accuracy and the fastest speed in past research. The current authors are trying to find a model that has higher accuracy and speed than the previous methods and makes fewer mistakes and has significantly higher efficiency than other models. The numerical tests implemented on the proposed model show the superiority of the new model compared to the conventional methods in the literature.

## کلمات کلیدی:

Data Analysis, cardiac patients, Hybrid system, High Accuracy, C-Means Fuzzy Clustering, Neural Network Structure