

### عنوان مقاله:

Multi-objective feature selection by using NSGA-II for Mashhad stroke and heart atherosclerotic disorder (MASHHAD Study) dataset

## محل انتشار:

كنفرانس بين المللي مهندسي برق (سال: 1395)

تعداد صفحات اصل مقاله: 6

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#### خلاصه مقاله:

Feature selection is one of the most important prepresses in classification and also for dimensionality reduction. By using data mining in classification procedure, each feature has its effects on the accuracy, cost and learning time of the classifier. So, there is a strong requirement to select a subset of the features before building the classifier. The Mashhad stroke and heart atherosclerotic disorder (MASHAD Study) is a 10-year cohort study that aims to evaluate the impact of various genetic, environmental, nutritional and psychosocial risk factors on the incidence of cardiovascular events among an urban population in eastern Iran. In this paper we have analyzed the performance of the latest multi-objective genetic algorithms (NSGA - II) for Mashhad stroke and heart atherosclerotic disorder (Mashhad Study) dataset. These datasets are pass throw proposed NSGA-II features selection and then applied Neural Network in order to classifying the data then its accuracy is checked with original dataset with complete attributes. The accuracy and performance of classifier after removal of attributes is discussed in this paper. The experiments clearly show the advantages of using NSGA-II for feature subset selection on mention dataset

# کلمات کلیدی:

Optimization, genetic algorithm, classification, Feature subset selection

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