

A Study of Accuracy of Data Mining Algorithms in Diagnosis of Emphysema  
Disease (EmD)

دراسة دقة خوارزميات التنقيب عن البيانات في تشخيص مرض انتفاخ الرئة

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Decision Support (DS), Emphysema Disease (EmD), Genetic Algorithm  
(GA).

Abstract

Data mining techniques are the Amounts of actual data are used to analyze these data to predict whole some data to support a decision-making in a problem-solving. A data mining is very useful to analyze any disease

characteristics to support the decision process and specify what the disease is and what Details IS. In the proposed present papers, using the real algorithms of data mining techniques to support different healthcare fields and adopted a correct decision about the diagnosis of emphysema disease and specify the risk factors for this disease to support decision process. In this research, a data-mining model of EmD prediction using a hybrid model Radial Basis Function – Neural Network (RBF–NN) and Genetic Algorithms (GA) has been presented. From the results, it has been seen that a hybrid model predicts EmD with nearly 95% accuracy. Furthermore, the examined samples of individuals share the same risk factors a symptom. Data mining depends on these symptoms and factors to diagnosis obstructive emphysema disease.