

عنوان مقاله:

Hybrid credit scoring model using genetic algorithms and fuzzy expert systems Case study: Ghavvamin financial and credit institution

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خلاصه مقاله:

expert systems can help to build banks customers' credit scoring models. Here, selection of key features of the credit scoring is important. Also, it is possible to express the features values as fuzzy. The problem is how to improve features selection by genetic algorithm, in way that these features can be employed as input in fuzzy expert system. This paper presents a hybrid credit scoring model with combination of features selection based on genetic algorithm and fuzzy expert system. The research conducted at the entry, in terms of result and objective is applied and descriptive research as case study, respectively. Ghavvamin financial and credit institution credit scoring data set is used to train and test the model. After data preprocessing, features selection is carried out using genetic algorithm. The range of selected features is determined by interview with an expert and via fuzzy logic and then credit scoring fuzzy rules can be generated. WEKA tool and fuzzy inference system (FIS) in MATLAB are used for data analysis. Results demonstrate classification accuracy of the proposed model is more than the other compared methods in this paper. Fuzzy rules created by this model can be used for credit scoring of bank customers

کلمات کلیدی:

Expert system, Credit scoring, Genetic Algorithm, Fuzzy logic

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