

Query-based classification with interval pattern structures: application to credit scoring

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Query-based classification is techniques which produces classification rules for an individual test object, having no prior classification rules set. The algorithm relies on pattern structures definition and derivation operator. We applied query-based classification approach to Kaggle open credit scoring data to assess probability the borrower is going to be insolvent. We argue that query-based classification allows one to achieve higher classification accuracy as compared to applying classical banking models and still to retain interpretability of model results, whereas black-box methods grant better accuracy but diminish interpretability.