

In credit scoring, feature selection aims at removing irrelevant data to improve the performance of the scorecard and its interpretability. Standard techniques treat feature selection as a single-objective task and rely on statistical criteria such as correlation. Recent studies suggest that using profit-based indicators may improve the quality of scoring models for businesses. We extend the use of profit measures to feature selection and develop a multi-objective wrapper framework based on the NSGA-II genetic algorithm with two fitness functions: the Expected Maximum Profit (EMP) and the number of features. Experiments on multiple credit scoring data sets demonstrate that the proposed approach develops scorecards that can yield a higher expected profit using fewer features than conventional feature selection strategies.