The method of parameters selection and data anomaly analysis results interpretation in decision support systems

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A model of categorical data attributes analysis is described. The model is based on calculation of local anomaly factor (LOF) and distances between categorical attributes values by using the inverse gravitation formula. The terms of objects density and objects core are described. The dependence between the results of model execution and the k-nearest parameter is discovered. Some intervals for k-nearest parameter are suggested and some example of using this intervals in linguistic variables definition are also shown. Linguistic variables can be used for k-nearest parameter choosing and fuzzy interpretation of LOF values.

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