

Title: Selected problems and methods in multivariate data analysis

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Abstract: The bachelor thesis deals with processing multidimensional data. The task was to apply selected methods on financial data. The thesis is composed of the theoretical section and the analysis of a particular database. The first four chapters deal with basic relations and definitions concerning random vector and variable, multidimensional data and the independence test in a contingency table. The following section is devoted to defining the particular methods selected: cluster analysis and discriminant analysis. In the practical section these methods are applied to a database of clients of a German bank.

Keywords: random vector, multivariate distribution, multivariate random variable, contingency table, cluster analysis, discriminant analysis.