

The thesis presents method called archetypal analysis, which belongs to the field of multivariate statistical data analysis. The method brings contribution to many different branches of science. It focuses in searching for the archetypes or so called "individuals of pure type" that are expressed as convex linear combinations of the original data. At the same time, the original data are represented as the convex linear combinations of the data minimizing the squared error in this representation. There is also a detailed example on processing of the real data. The thesis contains also a suggestion of ways how the original data can be divided into segments. The processed data set is attached.