

## **Annotation**

for the graduate work of Dmytro Dragan Dmytryevsch "Methods , algorithms intellectual decision support"

Total volume of the work: 99 pages, 17 figures, 2 tables, 2 appendixes, 40 bibliographic titles.

Graduate work deals with modern methods, algorithms of intellectual decision support. Different methods are covered in theory, with possible positive and negative application results specified, as well as effectiveness estimations in different conditions. The main part is devoted to Kohonen self-organizing map algorithm for solving context-related tasks in the issues of clustering, classification, data visualization. The research goal is to build a classifier model, a detailed demonstration of the costs, benefits of methods. The research object is a multidimensional sampling data. Subject of research is to build the classifier, the evaluation of effectiveness in task of pattern recognition. Classifier is builded with using models are based on Kohonen self-organizing maps, Active Appearance Models.

**Keywords:** SOM, AAM, classification, context-awared systems, Pattern Recognition