ABSTRACT

Theme: "Geodata analysis methods for venues establishment recommendation in Kyiv"

Diploma work: 96 p., 28 fig., 8 tabl., 2 appendixes, 19 sources.

DATA MINING, MACHINE TRAINING, REGRESSION, RECOMMENDATION SYSTEMS, GEOPOSITION, RANKING, LINEAR REGRESSION, REGULARIZATION, DECISION TREE, RANDOM FOREST, BOOSTING, NORMALIZATION, VISUALIZATION

The object of research is the analysis of geodata, algorithms of machine learning, construction of complex multilevel models.

Subject of research is geodata and mathematical models for constructing recommendations for geo positioning.

The purpose of the work is to analyze geodatabases and to study the possibility of providing recommendations on the location of public institutions.

Methods of research – data mining, methods of artificial intelligence.

The relevance of the work is caused by fact that today, in the era of large data, the direction of "smart city" (smart city) is rapidly developing. It consists in using the accumulated knowledge about the activities of people in order to improve the city infrastructure and standard of living. In turn, analyzing geodata and constructing predictive models can potentially improve the availability of goods and services for people and increase business profits.

The result of the work is a machine learning model designed to determine the rating of a specific type of public institutions, and provided guidance on geo positioning, cartographic visualization for the interpretation of model work and demonstration of results.

Ways of further development of the subject of research - the expansion of the list of features and models, checking the program work for various categories of public institutions. Checking data from other cities.