

ABSTRACT

The thesis is presented in 66 pages. It contains 5 appendixes and bibliography of 8 references. 16 figures and 3 tables are given in the thesis.

The goal of the thesis is to create a recommendation system for music as an API.

The paper briefly describes the main approaches to building a recommender system: content based, collaborative filtering and knowledge based. To solve the problem, a factorization model with weighted ALS minimization is used.

Software for collecting audio recordings of users of the social network of vk.com has been developed.

A number of tests have been carried out to determine the optimal parameters of the trained system, a sufficient number of assessments has been determined for the possibility of providing recommendations, examples of recommendations demonstrated, quantitative and qualitative analysis of the results has been carried out.

Key words: collaborative filtering, factorization of the matrix, recommendation system, explicit and implicit feedbacks.