

ABSTRACT

Bachelors thesis: 150 p., 20 fig., 13 tabl., 36 ref., 2 appendixes.

Objects of research are algorithms of sound recognition by fragment.

Subject of research is information signals analysis.

The objective is to create system for recognizing music by fragment.

Thesis's task is to develop algorithm of sound recognition by fragment, i.e. develop music player for OS "Android", which could recognize song on users request if it present in the database, then add missing ID3 tags to the containing file.

During the fulfillment of the work was prepared analysis of modern audio formats and methods of information signals recognition, an MPEG-1 Layer 3 was chosen among other formats as most popular, and Fourier analysis was chosen as least resource-cost. A system which performs assigned task was developed, this thesis contains description of common algorithms and used DB structure. MongoDB was chosen as DBMS.

Project's relevance is motivated by lack (or low popularity) of similar products at mobile OS market.

Results could be used as by commercial organizations, as by enthusiasts who desire to develop something similar.

MP3 ANALYSIS, SOUND RECOGNITION, ANDROID, PLAYER, FOURIER-ANALYSIS, MONGODB, JAVA, PCM ANALYSIS

