

## **ABSTRACT**

Work contains: 71 pages, 35 drawings, 6 tables, 14 sources, 2 appendices.

**CLUSTERIZATION, LLOYD'S ALGORITHM, SOFTWARE OPTIMIZATION, K-MEANS, PARALLEL CALCULATIONS, CASH-TABLE.**

The purpose of the work is to create a modified algorithm for grouping objects on the map.

The object of research is map markers.

The system creates grouping objects on the map. A modified Lloyd's algorithm has been developed, which works much faster than the classical method.

Developments were made in the Visual Studio on C# language.