

The goal of this thesis is to create an application which will be able to identify clusters in graphs. The application contains modified algorithms from cluster analysis and graph algorithms used for identifying communities in complex networks. The purpose of this work is not speed optimisation of implementation but the opportunity to try and compare results of each algorithm and verify whether special graph algorithms are truly better.

The core of this task was to modify algorithms from classical cluster analysis (four were chosen, with a set of settings each) to work with graphs and implement and present them within one application along with community detection algorithms (two, in more versions each).