**RECALL OF SUPERVISOR**

**For graduation qualification work of the bachelor**

**Pavlov Andrei Germanovich**

**"Development of software for investigation web space characteristics large organization"**

Graduation qualification work Pavlov Andrei Germanovich devoted to the new direction of the Web sciences, aimed at researching the structure of Web sites that make up the web spaces of large organizations.

Today, the structural researches of the Web are mainly focused on the application of graph-theoretic models to its fragments, when each site under research actually corresponds to the vertex of the graph. Sites of large organizations, such as SPbSU or Gazprom, have dozens and hundreds of websites and thousands of hyperlinks linking them. In general, the question is posed as follows: can we say that sites of the same topic have similar structure (in a certain sense)?

To solve this problem Pavlov was given several sub-tasks:

1. To develop a program-crawler to collect information about the organization's web space.

2. To develop programs for calculating several basic characteristics of a web graph based on data received by the crawler (PageRank, cliques, connectivity components).

4. To analyze the obtained characteristics.

5. To design a series of experiments for a given set of organizations, which can be obviously divided into three subsets.

6. To make conclusions about whether same sites have "similar" characteristics in a certain sense or not.

All the subtasks are solved.

The student has shown very good programming skills.

Experiments on a set of universities, research institutes and production associations showed the applicability of the implemented approaches and the direction for further researches.

Based on the results of the work, together with the supervisor, an article is being prepared for publication in a good Russian journal.

I believe that the graduation qualification work of the bachelor **Pavlov Andrei Germanovich "Development of software for investigation web space characteristics large organization"** deserves an "excellent" mark.

Scientific adviser,

Doctor of technical sciences A.A. Pechnikov