

## ABSTRACT

Masters dissertation consists of 90 pages, 21 pictures, 26 tables, 59 referring sources, 1 supplement.

**Topicality.** The quantity of information in the world is constantly growing. Modern information systems are generating billions of rows of data every day, most of them are unstructured, hard to analyze and read.

It became hard for the average Internet user to format his point concerning specified event, person or geographical object. Automated opinion detection systems from text data streams allow the user to save time while analyzing context, where some object is being mentioned. Thus the topic is relevant.

**Relationship with working with scientific programs, plans, topics.** work was performed at the Department of Automated Information Processing and Management Systems of the National Technical University of Ukraine «Kyiv Polytechnic Institute. Igor Sikorsky» within the topic «High performance computing and Big data methods and technologies».

**The purpose of the study** is to improve the process of detecting sentiment in text data streams written in ukrainian and to enhance visibility of analysis results.

To achieve the aim we had to solve the next **tasks**:

- to analyze existing methos for sentiment-analysis of text data streams;
- to develop the method for sentiment-analysis of text data stream;
- to implement this method as program tool and analyze its accuracy;
- to visualize the result of analysis as geospatial data;
- to examine the accuracy of developed method.

**Object of research** are processes of sentiment analysis of text data streams.

**Subject of research** are methods and information technologies of geospatial sentiment analysis of text data streams.

**Scientific Novelty.** The enhanced method of geospatial sentiment analysis of text data stream was developed, which uses sentiment dictionary and rules, supports processing of ukrainian texts and considers territorial distribution.

**Publications:** Scientific provision of the dissertations are published in abstracts of the conferences «INTERNATIONAL SCIENTIFIC-PRACTICAL CONFERENCE - MODS 2020» and Ukrainian scientific-practical conference of young scientists and student «Information systems and management technologies - ISMT-2020».

SENTIMENT-ANALYSIS, GEOSPATIAL ANALYSIS, ANALYSIS OF TONALITY,  
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