

Natural Language Processing and Multimedia Content Ranking

Anton F. Gallyamov, Konstantin E. Stepanenko
Department of Software Engineering, Mathematics & Mechanics Faculty,
Saint-Petersburg State University
Peterhof, Russia
{anton.gallyamov | kas.stepanenko}@gmail.com

Abstract

We present a model of intellectual multimedia content ranking system. Searching the World Wide Web is the best way to get some more extra information about any type of the multimedia content. This information involves affective evaluation, political, natural and any other events, related to content. In addition, it can involve information about co-authors, inspirers, characters and events related to them. All of this information can be easily found in blogs, reviews, articles, encyclopaedias, etc. Instead of using such a usual criterias as “rating” and “keywords” it is possible to accumulate knowledges about any subject and to provide the extended set of search parameters. But due to the ambiguity and complexity of natural language, the information mining becomes a pretty intricate problem. The paper develops two main contributions: (a) an approach to system modeling, based on the method of semantic analysis introduced by professor V. A. Tuzov; (b) a specific knowledge base, allowing to use very flexible content search criterias, by extending the existing multimedia content databases with important supplementary information.

INDEX TERMS: CONTENT RANKING, MULTIMEDIA, NATURAL LANGUAGE PROCESSING, SEMANTIC ANALYSIS.