

REVIEW
of the master's thesis of Lilia Shamsutdinova Rashidovna student of SPSU
on the topic: "Automatic style detection of fine-art paintings".

The reviewed Master's thesis of Lilia Shamsutdinova Rashidovna is devoted, undoubtedly, to the task of current interest: automatic recognition of the style of fine-art painting. Researches in this area are required because of the need for automatic structuring of large collections as well as lack of applications that solve this task.

To solve this problem, the author has analyzed the literature on this subject, studied the basic principles of the existing methods of extracting visual features from the image. Basing on the studied methods the author implemented algorithms for extracting low-level and high-level features and compared the results of the mentioned algorithms and their combinations to the known existing results in this area. As the result author proposed an algorithm for combining low-level visual features for describing modern painting styles.

Author, in a well-structured form, described the way to reach the goal of the thesis. The first chapter summarizes the methods for extracting various features. The second chapter is devoted to the description of the created solution - a program that automatically collects paintings from the site Artsy, extracts visual features, projects the resulting vector into a low dimension space, applies classification algorithms, and designs a neural network. The third chapter presents the results of experiments. Good and clear illustrations and tables show the conclusion that the suggested methods give better results comparing to the existing ones and provide acceptable accuracy.

The content of the thesis fully matches the topic and describes it in details. The research described in the work is relevant. Undoubtedly the author showed high independence during the research, which allowed to conduct interesting experiments and interpret it. The master's thesis is a completed study, indicating a high level of theoretical training and author's ability to solve practical problems.

There are no essential remarks to the thesis. Therefore I believe that the author conducted a qualitative research; the peer reviewed thesis deserves an evaluation of "**EXCELLENT**", and the author - the assignment of a master's degree.

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