

Call for Participation

Second International Symbol Recognition Contest at GREC 2005

City University of Hong Kong, Hong Kong SAR, China

August 25-26, 2005

<http://symbcontestgrec05.loria.fr/>

Following the experience of the First Contest on Symbol Recognition at GREC'2003, a new edition of the contest will be organized in the context of GREC'2005. The contest aims to analyze the performance of symbol recognition methods in several types of test data, according to a number of parameters and constraints involved in real applications of symbol recognition. Thus, the main goal of the contest is not to determine the "best" symbol recognition method, but to help in getting a deeper understanding of the characteristics, pros and cons of various approaches to symbol recognition. Thus, the outcome of the contest will be a number of tables, where various criteria (robustness, scalability, complexity) are presented for each type of test data.

The framework of evaluation for this edition of the contest will be very similar to the framework used in GREC'2003, but with some extensions concerning three aspects of the test data: the number of symbols in the test data (new symbols will be added to the framework), segmentation (non-segmented images and metrics for evaluation of segmentation) and the models of degradation (new and improved models of degradation).

Test Data

In the contest, test data will be organized into several datasets, each one containing different types of images according to the following criteria:

- Domain of application of symbol recognition: we will include images from two domains: electronics and architecture.
- Shape primitives: symbols used in the test data will be composed of straight lines and arcs.
- Image degradation: three types of degradation will be considered: affine transformations, binary noise and shape distortions. Several degrees of degradation will be defined for each kind of transformation.
- Segmentation: test data will consist of pre-segmented images as well as real complete drawings with non-segmented images.
- Formats: images will be provided in binary format (.bmp and .tiff) and in vector format (the .vec format used in previous graphics recognition contests) whenever possible, *i.e.* when an ideal vector representation is available. No vectorization method will be applied to vectorize binary images.
- Scalability: several datasets including an increasing number of symbols will be defined in order to evaluate scalability.

Development of the contest

The contest will be developed in three phases:

- Training: by June, 1st, models of all symbols and sample images for each category of data will be provided through the web site of the contest. These images be similar to those images used in the contest and can be used for training of methods.
- Execution: on August, 1st, final tests will be made available through the website of the contest too. Then, each participant will have to run his/her method on all or a selected subset of tests, and provide the results to organizers before August, 8th, following the format specified in the website.
- Analysis of results: the results will be analyzed by the organizers and a detailed report will be presented in a special session of the workshop.

Contest Web-site: <http://symbcontestgrec05.loria.fr/>

The website of the contest will be the place where all information regarding the contest will be made available to participants: models of symbols, description of formats, training sets, final tests, submission of results, etc.

Exploitation of results

A paper with the detailed analysis of the results will be published in the LNCS post-workshop book. This paper will be co-authored by the organizers and all the participants in the contest.

Call for participation

People interested in participating in the contest are requested to send an e-mail to the organizers before August, 1st, expressing their interest in the contest. Comments and feedback about the generation of test data and the development of the contest will be welcome. If you have public available data that could be included in the contest, please inform us too.

Contest Chairs

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