ICDAR 2017 Competition on Historical Book Analysis (HBA) « Call For Participation »



Context

In conjunction with <u>ICDAR'17</u>, the **HISTORICAL BOOK ANALYSIS COMPETITION (HBA)** is organized. The HBA competition will address a thriving topic of major interest of many researchers in different fields including (historical) **document image analysis**, **image processing**, **pattern recognition** and **classification**.

The HBA competition will provide a large experimental corpus and a thorough evaluation protocol to ensure a consistent comparison of image processing methods for historical document image analysis.

A new dataset which is called the **HBA dataset** will be released at this occasion. The HBA dataset is composed of **4436 real scanned ground-truthed one-page historical document images (2435 and 2001 printed and manuscript pages, respectively)** from **11 books (6 manuscripts** and **5 printed books)** in different languages and scripts published between the 13th and 19th centuries.

Ground truth

The documents of the HBA dataset are **gray-scale or color** images which were digitized at **300 or 400 dpi** and saved in the **TIFF format** which provides a high resolution of digitized images. Each selected foreground pixel is marked by a color that symbolizes the corresponding content type. **The ground truth information is currently available at the pixel level.**



DateDescriptionApril 01, 2017- Opening of the registration to competition - Publication of the sample datasetJune 01, 2017- Closure of the registration to competition - Publication of the evaluation dataset - Beginning of the competitionJuly 31, 2017- Deadline of the results submission - Deadline of the submission of the description of the participating methodsAugust 31, 2017- Sending the competition results to the participants	Important dates			
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The results of the HBA competition will be announced at <u>HIP'17</u> and <u>ICDAR'17</u> .				

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Organizers

Challenges

Two nested challenges are proposed in the HBA competition.

1- The HBA competition will aim at evaluating how image analysis methods could discriminate the textual content from the graphical one at pixel level.

2- It will aim at assessing the capabilities of the participating methods to separate the textual content according to different text fonts (e.g. lowercase, uppercase, italic...) at pixel level.

Evaluation protocol

The HBA dataset is divided into 2 sub-datasets, the **sample dataset** and the **evaluation dataset**.

The sample dataset will contain 2 books while the evaluation dataset will be composed of the 9 remaining books. Each dataset will be composed of a set of **training images** and a set of **test images**.

Several per-pixel classification accuracy metrics, including precision, recall, classification accuracy and *F-measure* will be performed.

How to participate

1- **Register** your interest through the <u>registration form</u> (before 01 June 2017).

2- Specify clearly in which challenge you would like to participate (challenge 1 only, challenge 2 only, both challenges 1 and 2).

3- Download the **sample dataset** (available from 01 April 2017).

4- Download the evaluation dataset (available from 01 June 2017).

5- Submit the **description** and the **results** of your methods (**before 31** August 2017).

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