

ICDAR2019 Robust Reading Competition – Challenge on Multi-lingual Scene Text Detection and Recognition

Why this new challenge in robust reading?

Text detection and recognition in a natural environment is a key component of many applications, ranging from business card digitization to shop indexation in a street. This new RRC-MLT challenge aims at assessing the ability of state-of-the-art methods to detect and recognize multi-lingual text. This situation is encountered in modern cities where multiple cultures live and communicate together, where users see various scripts and languages in a way that prevents using much a priori knowledge. Multi-lingual text also poses a problem when analyzing content gathered on the Internet.

What is this challenge about?

The scientific challenge of RRC-MLT-2019 is comprised of the following four tasks (participants can choose one or more tasks):

Task-1: Multi-script text detection

- **Input:** complete scene image
- **Output:** word-level bounding boxes of all the text in the image

Task-2: Script identification

- **Input:** cropped word images
- **Output:** script class number (7 scripts + symbols)

Task-3: Joint text detection and script identification

- **Input:** complete scene image
- **Output:** word-level bounding boxes of all the text in the image, and the script class number corresponding to each box

Task-4: End-to-End text detection and recognition

- **Input:** complete scene image
- **Output:** word-level bounding boxes of all the text in the image, and the transcription corresponding to each box

Dataset: The dataset is composed of scene images, where an image contains text of one or more of 10 different languages representing 7 different scripts. This makes the dataset useful for multi-lingual text detection, recognition and script identification. The considered languages are: Arabic, Bangla, Chinese, English, French, German, Hindi, Italian, Japanese and Korean.

How to participate?

1. Register at the RRC portal, this allows you to access the “downloads”
2. Download the training/validation datasets and adapt your method(s) to the input/output file formats
3. Run your method on the test dataset and submit the results

Who are the organizers?

** All in alphabetical order

****Scientific Committee:** J-C Burie, C-L Liu and J-M Ogier

****Organizers:** M. Bušta, D. Karatzas, W. Khlif, J. Matas, N. Nayef, U. Pal and Y. Patel

Keywords

- Multi-script text detection
- Scene text recognition

Important dates (2019)

- ❖ Feb 15 to May 2
Registration of participants
- ❖ Mar 1
Competition formal announcement
- ❖ Mar 15 to May 2
Train set available
Participants run methods on training/validation sets
- ❖ Mar 15
Evaluation protocol, file formats etc. available
- ❖ May 2
Registration closes
- ❖ May 2 to Jun 1
Test set available
- ❖ Jun 3
Participants submit results
- ❖ Sept 20 - 25
Announcement of results
- ❖ Oct 1
Public release of the full dataset

