

The First International Workshop on Action Recognition with a Large Number of Classes

Call for Papers

Automatically recognizing and localizing a large number of action categories from videos “in the wild” is of significant importance for video understanding and multimedia event detection. This workshop aims at exploring new challenges and approaches for large-scale action recognition with a large number of classes from open source videos. Submissions are solicited in the following two tracks:

I. Research Track

This track is open to various research efforts on action recognition and detection, as well as multimedia event detection. Topics of interest include, but are not limited to:

- Action representation and feature descriptors for robust action recognition.
- High-level attribute-based action recognition.
- Semantic feature based action recognition: semantic features are developed beyond low-level features. The approaches include statistical, manifold, or deep learning based action recognition methods, but not limited to them.
- Action recognition from only a few examples.
- Fusion-based approaches for action recognition.
- Action ranking for retrieval: methods for action (re-)ranking and retrieval.
- Action detection: methods for identifying the spatiotemporal location of actions in a video.
- Applications of action concepts, such as multimedia event detection and smart surveillance systems.
- Learning methods for a large number of classes.

II. Competition Track: Performance Evaluation on UCF101 Benchmark

[UCF101](#) is currently the largest action dataset in terms of both number of categories and videos, with 101 action classes and more than 13,000 unconstrained videos. For evaluation, we provide participants with the following features and annotations on UCF101, available for downloading at the [workshop webpage](#):

- Quantized low-level features including STIP, Dense Trajectory Features, and SIFT with location information, while participants are encouraged to generate their own features;
- Action attributes defined on action classes;
- Bounding box annotation for 24 actions.

We encourage participants to present action recognition systems or methods to solve challenges in recognizing large number of action classes. The evaluated methods can include previously published approaches. We will evaluate the success of the proposed methods based on their performance on UCF101 using two tasks:

- Action Classification: this task accepts submissions for whole-clip action classification over 101 action classes.
- Action Detection: this task accepts submissions on action recognition and localization over 24 action classes.

All submissions must follow the evaluation instructions described in the Evaluation Plan, which is available on the [workshop website](#).

Participants may either submit a notebook paper that briefly describes their system, or a research paper detailing their approach. All of the submission results will be summarized during the workshop and included in the workshop proceedings. Additionally, the top performers will be invited to give oral presentations, with remaining entries encouraged to present their work in the poster session. The notebook papers will be shared on the workshop website, but will not appear in the workshop proceedings.

Submission and Review Policy for Research Papers:

Submitted papers should follow the standard ICCV 2013 main conference paper format. Please refer to the ICCV 2013 [formatting instructions](#). All accepted papers (submitted before the early deadline of September 7) will be allocated up to 8 pages in the ICCV proceedings and will be charged a flat fee of US\$200. That is, there is no savings for using fewer than 8 pages. Each anonymous submission will receive three double-blind reviews, which will then be moderated by the workshop chairs. Please follow the paper submission web site to submit your manuscript.

Submission and Evaluation Policy for Competition Results:

Please follow the evaluation guidelines to perform your experiments. A notebook paper is due two weeks after the result submission in case a paper describing the method and experimental setup has not already been submitted to the research track.

Important Dates:

Submission deadline:

Evaluation results due (competition track): November 7, 2013

Papers due (research track): November 7, 2013*

Competition results announcement: November 28, 2013

Review results and author's notice: October 7, 2013 (early deadline submissions)

Camera ready: October 11, 2013 (early deadline submissions)

Publication date: As per conference schedule

Workshop date: December 7, 2013 (Full-day)

The authors who wish to have their papers published in the ICCV proceedings should submit their papers by the early deadline of **September 7.*

More information available at the workshop website:

<http://crcv.ucf.edu/ICCV13-Action-Workshop/>

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