

Minutes from TRECVID 2008 Event Detection Planning Telecon
January 16, 2008

Attendees:

Jon Fiscus (NIST)
John Garofolo (NIST)
Paul Over (NIST)
Travis Rose (NIST)
Mert Dikmen (University of Illinois at Urbana-Champaign)
Dave Eichman (University of Iowa)
Ram Nevatia (University of Southern California)
Andrew Senior (IBM)
Rainer Stiefelhagen (Karlsruhe)
Ying-Li Tian (IBM)
Lexing Xie (IBM)

This teleconference was held to form the initial working group for TRECVID event detection and to discuss the following:

1. Presentation of "straw man" proposal for TRECVID event detection
2. Answering questions regarding the "straw man" proposal

Jon Fiscus presented an overview of the proposal, which was followed by a question and answer session. The overview included the following topics:

- data
- phased release of event definitions
- evaluation tasks
- events
- schedule

Questions

Is there any difference between the days of recording (i.e., any difference in the observed traffic patterns, etc.)?

NIST expects to partition the data such that there is no difference in the distribution of events for devset vs. evalset. This will be verified in the dataset and relayed to the community.

Do participants have to process all 100 hours?

Yes. The challenge is to process realistic datasets, because of the problem is like finding a needle in a haystack. We support creative solutions (such as teaming) to process the entire dataset.

What will the events be?

These are still to be defined, but the evaluation will be limited to events that can be observed without additional inferencing (e.g., picking up an object vs. "stealing").

Systems may not be able to detect all of the defined events, depending on fine vs. coarse analysis of human motion.

This may require grouping of events into different classes, but this is still to be determined. Importantly, the event will only be annotated if it can be clearly seen; some will be easy, while others might be difficult or impossible for systems to detect.

Will the community be involved in defining the required events?

This may be possible for future evaluations. NIST/LDC are defining the required events initially in order to start the annotation process quickly. This is also why we propose the Optional event set.

Is there a sense that for this evaluation, we would be able to have successive evaluations so that we can begin thinking about event detection in a more taxonomic way?

This is consistent with our goals and we anticipate that our understanding of the task and events will evolve.

Can systems globally do retrospective processing, then function as online detection systems?

The brief answer is yes, but we think some clarification is needed.

The reason we propose to only support the retrospective task is pragmatic. We believe both retrospective and online detection are important, however, the system complexity required to implement an online task is better left to future year's work and/or the freestyle task. The supported task does not dictate how systems work internally. If you wish to build aspects of your system as "online" components, that's a perfectly acceptable solution.

Since this is a 5-camera collection, can the video from the 5 cameras be combined as input?

Yes.

Will camera parameters be available?

No.

If an event is detected in more than one view, does that count as multiple detections?

Yes. However, we plan to score events independently for each camera view.

Will there be real time-stamps, and are the cameras synchronized?

This will be answered definitively in future.

Is there audio?

There is an audio signal, but it may be empty. This will be answered definitively in future.

How large is the dataset?

We plan on distributing the video as MPEG-2 files with 12 GOP. The video is in PAL format (25 fps, 720x576). We are currently compressing the video, but we expect all of the video to fit on a single 500GB drive. Either USB-2 or FireWire drives are preferred for shipping data.

Next telecon:

The next telecon is scheduled for January 23, 2008 at 11 am (Eastern Time). The main topic for discussion will be how to evaluate systems in this new event detection track.