

Title:

Short description of Asahi-kasei's SBD system on TRECVID2007.

Author:

Ken Ishihara

Organization:

Information Technology Laboratory Asahi Kasei co.

1. Briefly, what approach or combination of approaches did you test in each of your submitted runs? (please use the run id from the overall results table NIST returns)

* (runid: a sentence or series of keywords characterizing run)

* (runid: a sentence or series of keywords characterizing run)

* ...

sei1: Base system with cut and fade detection

2D correlation of successive frames in low resolution gray scale image is used to detect cuts. Together with Euclid's norm size to check reliability of correlation and detection of fades.

sei2: additional gradual detection

with additional long term 2D correlation in time(-50 and +50 frames) to detect gradual changes.

2. What if any significant differences (in terms of what measures) did you find among the runs?

Lot of missing graduals for both runs. Additional gradual detectors helped for sum degree but was not enough.

As we planed to add some detectors, did not adjust parameters for best results with lot of false graduals.

3. Based on the results, can you estimate the relative contribution of each component of your system/approach to its effectiveness?

At least additional gradual detector helps.

4. Overall, what did you learn about runs/approaches and the research question(s) that motivated them?

Normalization check is necessary in using 2D correlation. We tried 2D Color correlation did not give us critical impact in detection of shot boundary detection.

It seems that gradual detection requires multiple correlation gathered up together. It is easy to talk about distance between two pictures but hard to say correlation for more than 3 pictures. Depending on types of gradual function which give us linear properties (i.e. gradual or not) changes.